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SURVEY RESEARCH CENTER
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THE UNIVERSITY OF MICHIGAN

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EDITOR'S NOTE:

ECONOMIC OUTLOOK USA is designed to aid private and public decision makers in achieving a better understanding of the economic and social environment in which they will be operating. The analysis in this publication incorporates direct measurements of the expectations, attitudes and plans of both consumers and business firms with the economic and financial variables traditionally used in forecast models. The philosophy of this publication is that a blend of anticipatory and traditional measures provides richer insights into prospective developments, insights which will produce more consistently reliable forecasts of both economic and social change.

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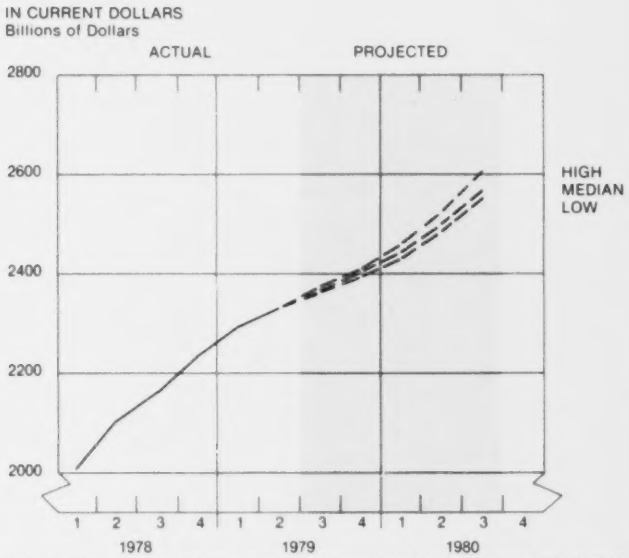
ECONOMIC PROSPECTS

Actual and projected; seasonally adjusted quarterly data at annual rates

GROSS NATIONAL PRODUCT



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

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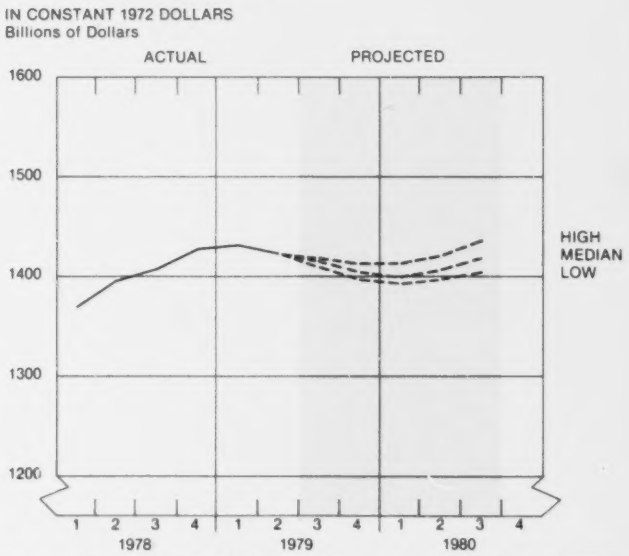


Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

Frequently Used Abbreviations:

ASA	American Statistical Association
BEA	Bureau of Economic Analysis, U.S. Department of Commerce
NBER	National Bureau of Economic Research
SRC	Survey Research Center
197*x:y*	*y*th quarter of 197*x*

The Inflation-Recession Dilemma: Predictions and Puzzles

Victor Zarnowitz
Professor of Economics and Finance
The University of Chicago

After having declined at a 2.4% annual rate in the second quarter, real GNP may have risen slightly in the current quarter (as indicated by the latest, very preliminary and incomplete "flash report"). Does this mean that the widely heralded recession is already over, or that it never occurred, or on the contrary that the worst lies still ahead?

The First Predicted Recession?

As a rule, past business downturns came as a suprise to economic agents and observers generally. Few can boast of having predicted business cycle peaks with tolerable accuracy, and hardly any such forecasts have ever gained much acceptance before the event. Indeed, public recognition of recessions has been shown to be quite tardy, often lagging the downturn by six or more months. Forecasters who are aware that expansions age, develop distortions, and falter (at varying speeds), and that they may be shortened or prolonged by economic policies, can do better than that. Still their comparative advantage lies mainly in the ability to reduce the recognition lag rather than predict the turning points well ahead. Sizable leads at peaks are characteristic of a number of early cyclical indicators, but these are sensitive series that must be smoothed to reduce false signals; when, in addition, the lags and uncertainties of the data are taken into account, the effective leads are much reduced. In short, contemporaneous recognition of business cycle turns constitutes a standard of good performance in light of the actual forecasting record.[1]

Such being the facts of the matter, it is interesting enough to note that this time around many forecasters anticipated a recession in the near future before the second quarter decline in real GNP was first announced. Some forecasting services started predicting two or three quarters of declining real GNP during 1979-80 as early as June 1978 (Merrill Lynch Economics and MAPCAST-General Electric Co.); others joined them in October or November (Conference Board, DRI, Chase); and many individual economists did the same in February and May 1979 (ASA-NBER surveys). To be sure, in most cases the forecasters expected the downward movements to be quite small, and some (Wharton, Michigan, Kent Economic Institute) until very recently held out for very low but still positive growth rates only. Moreover, the definition of a recession as a two-quarter decline in constant-dollar GNP is unsatisfactory, as argued below. But the projected declines not only multiplied but also gradually lengthened and deepened. For example, the median forecasts from the three ASA-NBER surveys this year involve successive increases in the duration of the expected fall in total output—from two to four quarters—and in its amplitude—from 1% to 2.3% at annual rates. The distributions of the individual predictions and the comments of the forecasters leave little doubt that the majority now anticipates an economic decline which, though relatively mild, would be sufficiently long. large, and diffuse to qualify as a recession.

But suppose that the first estimates concerning a possible improvement in the third quarter prove right: some would see this as necessarily invalidating the recession forecasts. Such conclusion would be wrong, however. True, a single-quarter decline (such as happened in 1959:3 due to the major steel strike) does not constitute a recession. If real GNP and other important indicators of aggregate economic activity moved up a little in this quarter and the next, the year would have witnessed a slowdown but not a recession. But most forecasters view the probability of such an outcome as quite low. Rather it is likely that the preliminary figures for the early part of 1979:3 reflect a transitory pickup in consumer spending, encouraged by the automobile rebates and other discounts but perhaps only delaying an upward adjustment in saving rates, which have been extraordinarily low in the past two years. A mixed bag of other factors, some adverse and some positive, may have also contributed: an inventory pile-up, the quickened pace of bank credit and money expansion after the slowing in the second half of 1978, a rise in total government spending and net exports. But the basic sources of the weakness in economic activity are all still here, notably the soaring inflation which, at the high tax rates imposed on nominal incomes, cuts heavily into the spendable funds of large groups of consumers. The latest attempts to prop the dollar with tighter money and higher interest rates have yet to show their effects. Thus it is widely expected that the rest of the year will provide a clearer evidence of the recession. Indeed, some fear that a pause now could make the recession ultimately deeper by inducing delays in the necessary adjustments—cutbacks in production and employment to reduce inventories and pare down costs.

Should the economy take the course of a short-lived improvement on 1979:3, it would be a classic demonstration of the pitfalls confronting the simplistic definition of a recession as two or more consecutive quarters of declining real GNP.[2] The terms of that definition would not have been satisfied, but a recession would have occurred. A

[1]For evidence covering the period 1948-61, see Rendigs Fels and C. Elton Hinshaw, *Forecasting and Recognizing Business Cycle Turning Points*, National Bureau of Economic Research, New York, 1968. More recently, the forecasters' performance was reasonably good in the recession of 1970 but particularly poor in that of 1974; see Stephen K. McNees, "The Forecasting Performance in the Early 1970's," *New England Economic Review*, July/August 1976, and Victor Zarnowitz, "An Analysis of Annual and Multiperiod Quarterly Forecasts of Aggregate Income, Output, and the Price Level," *Journal of Business*, January 1979.

[2]History provides examples of troubles with such an identification. Since 1947, the beginning of the official quarterly national income account data, there were two occasions on which real GNP turned down before the onset of the recession as dated by NBER (in 1960 and 1969) and two occasions on which it rose for one or two quarters during a recession (in 1949 and 1970). The NBER identifies recessions by analyzing a collection of indicators along the lines noted in the text below; its business cycle chronology is widely accepted and used.

careful analysis of a larger set of monthly and quarterly series on production, employment, real incomes and sales would in time lead to the proper diagnosis and dating. The very concept of recession requires a consensus of cyclical declines in these economic processes, and one must also guard against possibly misleading measurement errors in any single series, which reinforces the need for such an analysis.

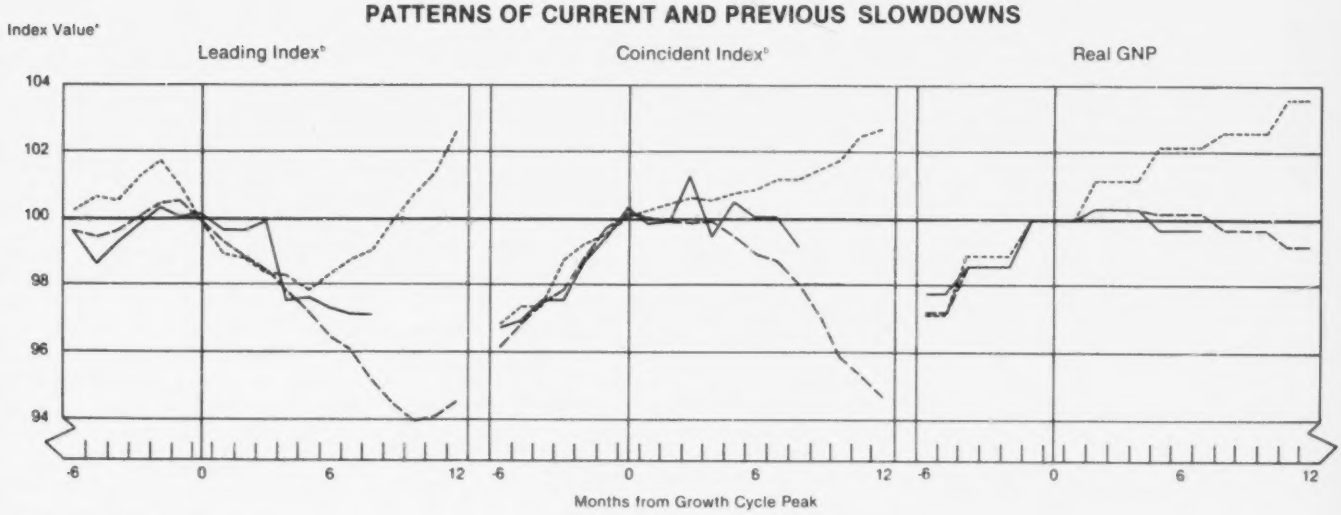
The Current Situation and Patterns of Previous Recessions and Slowdowns

It is instructive to compare the changes in economic indicators this year with their average changes during the corresponding stages of past cycles. Since 1948, there have been nine periods in which the U.S. economy grew for some time below its long-term trend rate. Six of these slowdowns (beginning in 1948, 1953, 1957, 1960, 1969, and 1973) developed into absolute declines in aggregate economic activity—the NBER-classified recessions. The other three (beginning in 1951, 1962, and 1966) did not result in recessions and ran their course as phases of sluggish (but positive) growth to end in renewed expansion. The charts below show the average patterns of relative movement during the six recessions and three growth slowdowns for the monthly composite indexes of leading and roughly coincident indicators and the quarterly GNP in constant dollars.

The economy is now in another period of economic slowdown, which is tentatively dated as having started in December 1978 when the overall economic growth fell below its trend rate. The pattern of the current slowdown is shown in the charts by the solid lines. For both indexes, these curves lie between the historical patterns for recessions and growth slowdowns, but appear to be drifting downward, like the recession averages. The leading index, which comprises twelve early-moving and sensitive cyclical indicators, reached a peak in October 1978 and declined only slightly in the first four months of the slowdown but much more so in the next four months. In August (month 8 in the charts), this index stood near 97% compared with the 100% level at growth cycle peak, whereas the corresponding values for the average recession and the average slowdown patterns are about 95% and 99%, respectively. The coincident index, which combines four monthly comprehensive output, input, income, and trade measures (in physical units or constant dollars), reached its peak in March and has declined approximately 2% since. After eight months of the current slowdown, its value was much closer to the historical pattern for recessions than to that for slowdowns. The same applies to real GNP after six months (here the latest figure plotted refers to 1979:2).

No firm conclusion can be drawn from these measures at the present time, but they lean toward the alternative of a recession. However, this is still merely a judgment based on interpretation of fragmentary evidence; and an examination of individual indicators adds some further complications. Thus the level of common stock prices (the index used here is the Standard and Poor's 500) has been rising this year and is now somewhat higher than it was at its two last peaks, in September 1976 and August 1978. It is not very unusual for the market to show a lengthy decline during a business expansion (as happened only recently, in the period 9/1976-3/1978), but it *is* very rare for it not to turn down prior to a business cycle peak. Does this mean that the stock market, unlike most business analysts and forecasters, does not anticipate a recession after all? Or that its signals are beclouded by special factors, e.g., the strength of oil and mining issues?

PATTERNS OF CURRENT AND PREVIOUS SLOWDOWNS



*Growth cycle peak = 100.
*From *Business Conditions Digest*
Key: ——— 1979 slowdown
---------- Average, 3 slowdowns that did not become recessions
– – – – – – Average, 6 slowdowns that became recessions

Source: Center for International Business Cycle Research, Rutgers University, Newark, New Jersey.

A closely related question is what is happening to profits and profit margins. Here the data are quarterly, tardy, and notoriously difficult to read and even reconcile. Corporate profits after taxes, in constant dollars, with inventory valuation and capital consumption adjustments, may have weakened a little recently but are still high. The ratio of price to unit labor costs in the nonfarm business sector shows a downward trend and has now come down to its low 1974 levels. But other indicators of corporate profits and cash flows show considerable strength, even after allowances for the effects of inflation.

After the recent settlements in the automobile industry, wages in the unionized sector are apt to rise faster. Given the poor overall productivity record, unit labor costs can be expected to do the same. If tighter monetary conditions prevail, the state of demand in some sectors may not permit all firms to raise prices effectively so as to fully compensate for the higher costs. The argument applies as well to the relation between selling prices and costs of finance, even though it is true that real interest rates – nominal rates minus prospective inflation – are presumably still low and far from burdensome generally.

Inflation: Some Longer Views

Inflation has been growing and getting more and more entrenched in common expectations and transactions for some 15 years now, during the Vietnam war and thereafter, through long stretches of excessively expansionist monetary and fiscal policies. The general price increases abated significantly only in the aftermath of the 1970 and 1974 recessions, and then only temporarily. Each new spurt of inflation started from a higher price level. It would be surprising if another mild slowdown or even a serious but brief recession were to bring about a more substantial and lasting reduction in inflation rates than the relief of 1975-77.

As long as inflation was moderate and did not impair real incomes of any large class of people, inflationary policies which brought short-term benefits of higher levels of activity and employment were generally popular. However, the greatly accelerated inflation of recent years, coupled with the sharp rises in the relative costs of energy, various imports, and food, has hurt real incomes of many and alarmed many more. A vocal constituency for anti-inflationary policies has emerged, but its voting and staying powers remain to be tested.

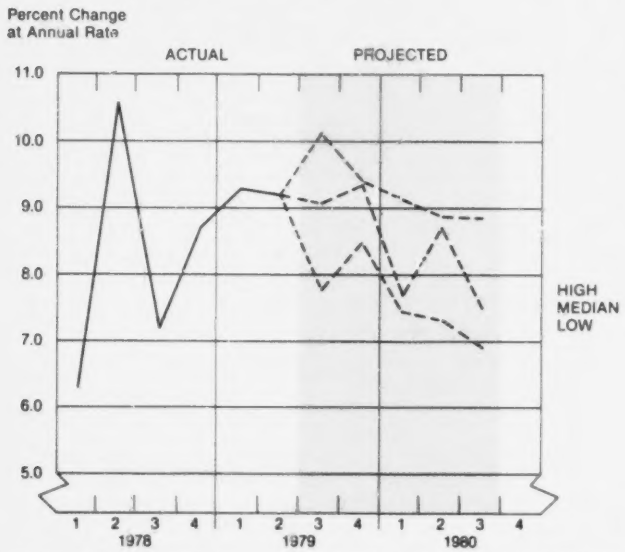
The inflationary bias which the economy has acquired can be reduced through persistent and consistent implementation of a strategy of moderation that people would come to believe and project. Few economists would deny this, but many doubt the credibility and hence practicality of such a long-term program, fearing that it would have high short-run costs and be very vulnerable to political pressures. However, views on these matters are in flux as events force their adjustments: thus, few are still prepared to treat inflation as if it were relatively harmless.

At the other end of the spectrum, some favor a pre-announced, strong, and uncompromising deflationary action, which they think more credible and likely to succeed faster in dispelling expectations of continued inflation. In contrast to this apparently still small but very active group of theorists, the majority views this scenario as hiding unacceptably large real costs and risks; it opts for gradualism, though for a number of reasons and with different hopes and misgivings. Despite much lively speculation, this area of research is still uncharted, which puts a premium on caution that is an advantage of the gradualist position; the hard evidence required to support the drastic "cold turkey" policy seems to me essentially lacking.

The Near Future

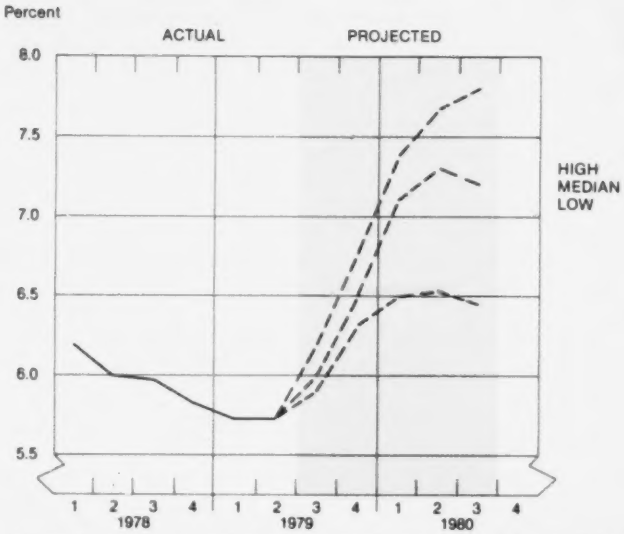
According to the median forecast from the August ASA-NBER survey, the rate of inflation in terms of the GNP implicit price index will slightly exceed 9% at annual rate in 1979:3, then remain near 8% in the next three quarters and decline to about 7% in 1980:3. This would be a modest

GNP IMPLICIT PRICE DEFLATOR



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

UNEMPLOYMENT RATE



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

improvement but a welcome one in view of the mildness of the predicted recession. The unemployment rate in the same period is projected to increase from 6% to just about 7.3%. However, many individual forecasts are more pessimistic; that is, they specify smaller declines in inflation rates during 1980 (to 7.5%-8.0%) and larger rises in unemployment (closer to 8% than 7%). Also, some of the longer forecasts from econometric models have inflation picking up again later in 1980-81 during the expected recovery, though remaining below its recent levels.

Thus the predictions recognize that inflation usually decelerates as a result of recessions, but not very much. Wages and other costs resist downward pressures strongly. The temporary deceleration is part of the dynamics of the business cycle, not to be credited to any active government policy. Later when the recovery comes, again even without any policy intervention, two counterpoised effects are likely: productivity and costs improve as outputs rise more than inputs, which alleviates inflationary pressures, but aggregate demand strengthens greatly too, which intensifies them. These well documented cyclical developments, and others, are neglected by many contemporary economists, yet they are significant. But it is true that the long inflationary trend, due primarily to the cumulative working of monetary and expectational factors, is now in large measure impervious to short-term business fluctuations.

This long inflation has spread around the globe, but with important international differences which complicate the situation considerably. Inflation moderated where tight policies prevailed but at the cost of depressed economic growth rates. In the U.S. there was more stimulation and the dollar tottered. Coordination of national responses to world inflation and to further "supply shocks," mainly on the energy front, could probably help much, but divergent short-term interests make it difficult to achieve. The opposite course involving foreign exchange controls and trade restrictions is fraught with grave dangers.

September 1979

P.S. In its new policy announcement of October 6th, the Fed declared its intention to reduce and control the rates of growth in bank reserves and monetary aggregates, while permitting wider fluctuations in interest rates. Right now and in the near future, this means higher costs and reduced availability of credit; thus it reinforces and deepens the recession forecast. But the strategy, expected to be pursued steadily but not rigidly, is indeed necessary to bring down unacceptably high and still rising inflation.

Inflation's Impact on the Business Cycle: The Western European Example

Raymond J. Saulnier
Emeritus Professor of Economics
Barnard College, Columbia University

This note advances the hypothesis that for economies to operate in an inflationary context will mean, among other things, a changed format of the business cycle—ups and downs that occur more frequently than in the past, with lesser amplitude than formerly, especially in the expansion phase; utilization of resources higher on the average and more stable than in earlier cycles; and growth over extended periods that is lower than previously in post World War II years. I believe Western Europe's economies currently exemplify this changed format; and while this note does not develop the point, I expect the same will be seen in the United States.

Revised Forecasts for Western Europe

The hypothesis is suggested, certainly, by the need to scale down economic projections for Western Europe after hardly more than a year of expansion, which all forecasters are now doing. As little as three or four months ago it was commonly believed that German economic growth would reach 4.3 percent this year, and that 1980 would come close to repeating that; now, the common view is that 4 percent is more likely for this year, and 3.2 is as high as most are willing to go for 1980. A broadly similar writing-down was typical for most other countries in a roundup of views made recently by this writer, with the result that for Western Europe as a whole, including the United Kingdom and weighting individual economies roughly as in OECD compilations, growth can be projected to average only about 3.2 percent this year and to drop to around 2.6 in 1980. Three months ago the 1980 average would have been at least moderately above 3 percent.

At the same time, forecasts of wage and price inflation for Western European economies are being scaled up. For wages, the 1979 average is being lifted from 9.7 to 10 percent, and for 1980 from 10 to 10.1; for cost-of-living, the 1979 average rises from 7.5 to 8.1, and for 1980 from 7.1 to 7.9.

Pressed for longer-term forecasts, few analysts are willing to specify growth rates significantly above what they

see for 1980, but optimism takes over when they turn to inflation: rightly or wrongly—one hopes rightly—the common view is that annual increases in wages, labor costs per unit of output, and prices will decelerate through 1984 by 2 to 2.5 percentage points from 1980 levels.

Heightened Sensitivity and Reactions to Inflation

Underlying the developments that provoked these adjustments, the hypothesis maintains, is the heightened sensitivity of public sentiment to inflation and its reflection in the reactions of public policy. Although Western Europe's 1974-75 recession caused inflation to slow significantly, it slowed considerably less than people generally and their governments hoped for. Furthermore, the slow growth that followed recession from mid-1976 to mid-1978 carried the inflation slowdown only a small additional distance, to everyone's disappointment. Then, when activity picked up in the second half of 1978 inflation accelerated quickly. Reacting promptly, public policy in most countries, especially money policy, within a relatively few months was redirected to restrain the advance and check the acceleration of inflation. Anticipation of fairly vigorous and extended expansion was abandoned and changes of forecasts followed.

What accounts for these reactions in not simply that inflation is high nearly everywhere; what is making the difference is the change, for the worse, in inflationary expectations. There seemed no reason twenty years ago to doubt the ability of government to hold prices relatively stable, and there was fairly high confidence it would do so. Now, in both the United States and Western Europe, inflation seems somehow intractable. The mood may be unduly pessimistic, as I believe it is, but it is all the same widespread and deeply rooted. And it has significant economic consequences: one is that consumer purchases that involve a substantial outlay continue at high levels even when most individuals feel the nearterm economic outlook is bleak. A second is that government is more willing than formerly to check expansion in order to contain inflation.

The story varies in Western Europe from country to country, with Germany perhaps the best example. Following recession in 1973-75, industrial production recovered to levels slightly above those attained in 1974, but from late 1976 through mid-1978 output was virtually flat. Money supply expansion accelerated in late 1977, obviously to help promote recovery, and six months later industrial output rose fairly sharply. Activity gained momentum in 1979, inspiring forecasts of fairly vigorous economic growth, but a rub came early in the year when inflation began also to speed up. Reacting quickly, money supply increases were toned down, and by the second quarter of this year restraint was evident on all sides. Suddenly it became necessary to scale down economic forecasts.

Developments in Belgium, Austria, the Netherlands, and Switzerland have unique features but fit this script fairly closely. The UK, Italy, and France deviate more widely, primarily because they are dealing with markedly higher inflation rates. Scandinavia is nowadays a collection of special cases, though Sweden and Denmark display much of the standard syndrome. Spain is for the moment more a subject for political than for economic analysis.

Finally, it is my belief that the best example of the new cyclical pattern—call it "bumping along around a low-growth trend"—will prove to be the United States, where indications are that the current downturn will be moderate, that it will be followed by a not especially vigorous upturn, which will be fairly quickly muted, perhaps aborted, as policy strives to prevent a speeding-up of inflation.

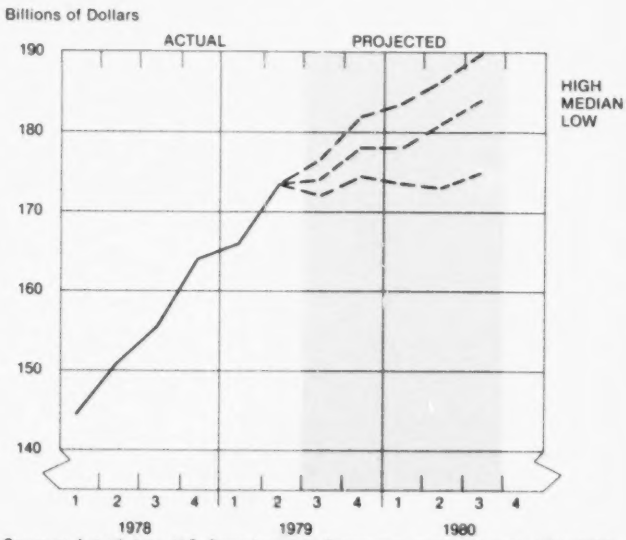
One Reservation

The principle reservation I have regarding the hypothesis presented here is that it is probably a mistake to rule out altogether the possibility that public policy, in one or more major countries, including the United States, will fail to react to inflation acceleration as in the standard script—perhaps concluding once again, mistakenly, that it can take care of inflation with an apparatus of direct wage and price controls—and will allow credit and monetary expansion to get so far out-of-hand as to make a bruising kind of credit crunch and deep recession inevitable.

Perhaps, but I think not. The past fifteen years have not been good ones for optimists, but I expect developments over the next few years to be less dramatic than commonly depicted in accounts of a "coming crisis." The major promise held out by this optimistic belief is that time will afford an opportunity, within the new and muted cyclical context, to engineer a gradual deceleration of inflation.

September 1979

BUSINESS CAPITAL OUTLAYS



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

Consumer Pessimism Nears Record Level

Richard T. Curtin
Director, Surveys of Consumer Attitudes
Survey Research Center
The University of Michigan

Widespread Pessimism

The Index of Consumer Sentiment was 64.5 in the August 1979 survey, down 3.6 Index-points from the May 1979 quarterly reading. During the past two years, the Index has traced a consistent path of decline (see the large chart). By August 1979, the ICS stood nearly 14 Index-points below the year earlier reading, and 23 Index-points below August 1977. The Index is now just 6.5 points above the all-time record low recorded in 1974-75. Growing awareness of a slowdown in the economy has led to sharp increases in unfavorable evaluations of business conditions and has heightened fears of spreading unemployment.

Among families with incomes of $15,000 or more, the Index was 59.1 in August 1979, 3.0 Index-points below May 1979 and 13.4 points below August 1978. Among families with incomes of $20,000 or more, the Index reading was 70.0, down from 73.5 in May and 85.1 in August 1978.

The overall pattern of decline continues to indicate that the current recession will be less severe than the one of 1974-75. Charts 1-3 compare the extent of the recent decline in consumer sentiment with those occurring in 1969-70 and 1972-74. As shown in Chart 1, the decline in the ICS, while not as steep as past declines, equals or exceeds prior declines in duration. Charts 2 and 3 indicate that the extent of decline recorded by the two groups of components differed significantly. The "current" group, which includes evaluations of personal finances and buying conditions, has exhibited only small recent declines in comparison to the prior periods. In contrast, the extent of decline in the "forward" group, which includes business and personal financial expectations, has been as sharp as in the 1972-74 period. The smaller overall decline recorded by the ICS can thus be attributed to the relatively small declines in favorable evaluations of current economic conditions.

Inflation Prompts Divergence in Attitudes

Inflation has both severely depressed favorable expectations and, through buy-in-advance price rationales, has helped to maintain favorable evaluations of current buying conditions. When the divergence, or the spread, between the current and the expected parts of the Index of Consumer Sentiment is calculated, the importance of inflation expectations is highlighted.

Prior to the mid-1960s, expectations for future improvement were more favorable than evaluations of current conditions; since the mid-sixties, expectations for change have consistently been less optimistic than evaluations of current conditions (see the top chart on p. 93). Just prior to the 1974-75 recession the extent of the divergence increased considerably; the divergence narrowed following the onset of the recession and reached its low point in 1976. The peak divergence recorded just prior to the 1974-75 recession was only exceeded by the May 1979 reading.

The divergence between evaluations of current and expected economic conditions is highly correlated with expected price inflation, exhibiting a bivariate time series

Chart 1. COMPARISON OF DECLINES DURING THREE RECESSION PERIODS: INDEX OF CONSUMER SENTIMENT (ICS)

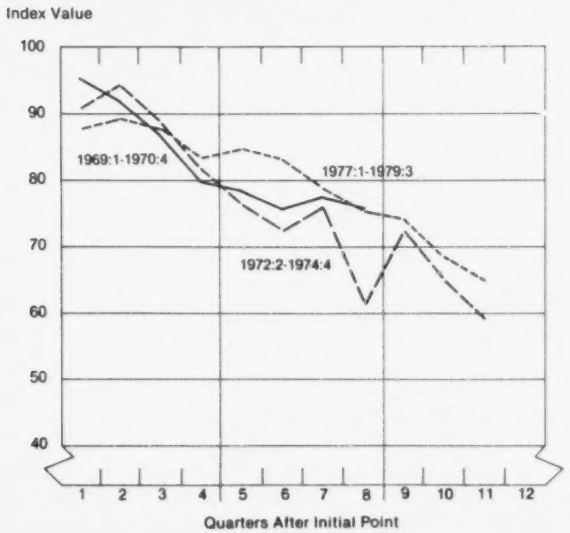
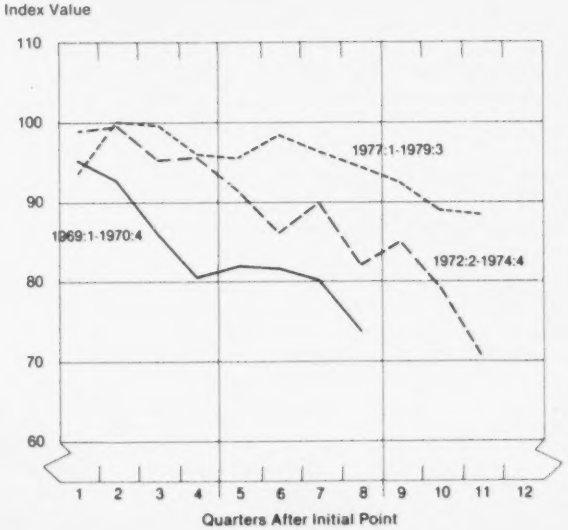
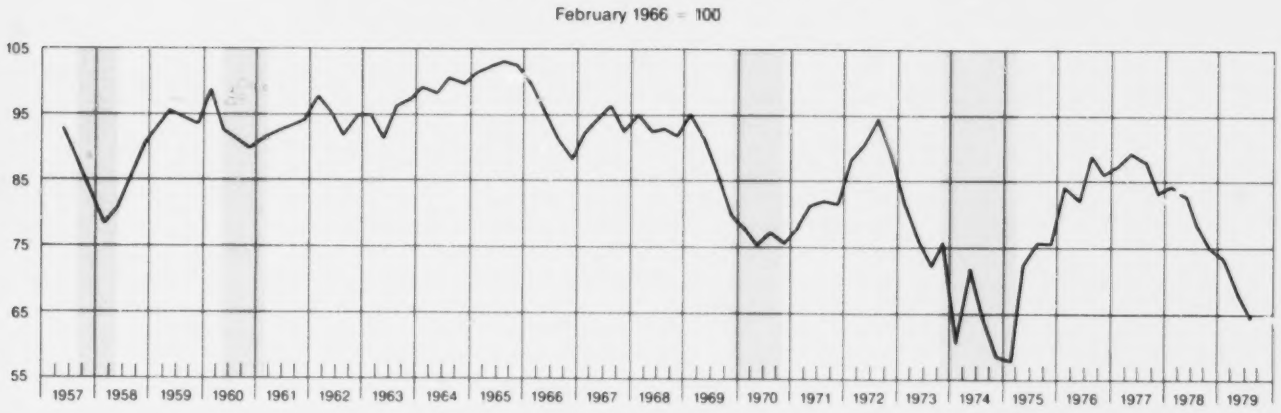


Chart 2. COMPARISON OF DECLINES DURING THREE RECESSION PERIODS: CURRENT COMPONENTS OF ICS



INDEX OF CONSUMER SENTIMENT



Note: Shaded areas indicate recession periods as designated by the National Bureau of Economic Research, Inc.

correlation of 0.88 during the 1954-1979 period. Prior to the mid-1960s, when expected changes were more favorable than current evaluations, the expected rate of inflation remained below 3%. Since then, whenever maximum divergences between current and expected conditions have been recorded, peaks have also been recorded in expected rates of inflation (compare the top and bottom charts on p. 93).

Economic Slowdown Reported

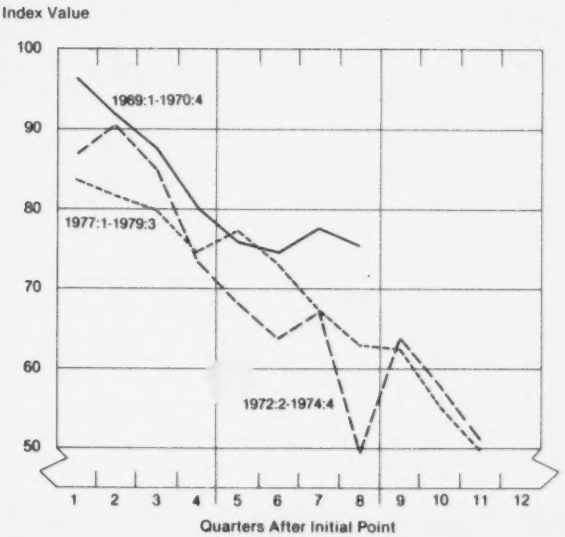
Compared with a year ago, more respondents have more frequently reported hearing unfavorable changes in business conditions in the August 1979 survey. In recent months, respondents have increasingly reported growing signs of a slowdown in the economy. Among all respondents, 68 percent reported that current business conditions were now worse than a year earlier, up from 50 percent in May 1979 and 38 percent in August 1978. Expected changes in business conditions also have deteriorated sharply during the past year; 39 percent expected business conditions to worsen during the year ahead in August 1979, up from 37 percent in May and 26 percent in August 1978. Nearly one-third of all respondents (31 percent) rated current business conditions as worse than a year earlier *and* expected business conditions to worsen in the year ahead.

Among all families, 71 percent expected bad times financially in the economy as a whole during the next 12 months in August 1979, up from 63 percent in May and 51 percent in August 1978. Sixty-six percent expected periods of widespread unemployment and recession during the next five years, up from 57 percent in May and 54 percent in August 1979.

The sharp declines in evaluations of business conditions during the past year have resulted from different forces. The declines occurring during the past 3 months have been largely due to heightened fears of spreading unemployment. In August 1979, 61 percent of all respondents expected unemployment to increase during the year ahead, up from 40 percent in May and 33 percent in August 1978. In contrast, heightened price expectations were more closely related to earlier declines in business evaluations. In the August 1979 survey, respondents expected consumer prices to increase on average by 10.4%, down from the 11.4% all-time peak recorded in May, although above the 9.8% recorded in August 1978.

The view that unemployment represents the most serious economic hardship facing the nation has grown in recent months. In August 1979, 27 percent of all respondents reported that unemployment rather than inflation was the more serious economic hardship, up from 18 percent in May 1979. The proportion reporting that inflation represented the more serious economic hardship fell from 68 percent in May to 63 percent in August. This increase in concern with unemployment was documented among high as well as low income families. Confidence in government economic policy to combat inflation and unemployment remained near historic low levels in the August 1979 survey. Among all families, 42 percent rated government policy as poor, up from 38 percent in May 1979 and 36 percent in August 1978.

Chart 3. COMPARISON OF DECLINES DURING THREE RECESSION PERIODS: FORWARD COMPONENTS OF ICS



Marginal Improvement in Personal Finances

Evaluations of personal finances posted some improvement in the August 1979 survey over their May 1979 low-point. Among all families, 38 percent reported that their current financial situation had worsened compared with a year earlier, down from 40 percent in May but above the 33 percent recorded in August 1978. Fewer respondents, in explaining these changes, mentioned higher prices making their families worse off (40 percent in August 1979, compared to 43 percent in May and 35 percent in August 1978). During the months of May through July 1979, food price increases averaged less than 5% per month after posting double-digit increases during each of the previous five months. The sharp decline in food price increases which occurred in the Fall of 1978 also temporarily produced more favorable financial evaluations.

Although evaluations of current and expected changes in personal finances have recently improved, more families rated their current financial situation compared to a year ago as worse rather than better, and more families expected their financial situation to worsen in the year ahead rather than to improve. Just 13 percent of all families who reported being better off financially than a year earlier also expected to be better off financially in a year.

Approximately the same proportion of families expected nominal income increases compared with year-ago readings (63 percent in August 1979 versus 61 percent in August 1978). The distribution of expected increases, however, has shifted significantly, and is now concentrated in the 6-9% range. Among all families, 25 percent expected their incomes to increase by 10% or more in August 1979, down from 31 percent in August 1978. Fewer families also reported that they expected income increases in the range of 1-5% in August 1979 (12 percent) than a year earlier (14 percent). The proportion of respondents who expect income increases in the range of 6-9% almost tripled (6 percent to 17 percent) during that period.

Greater concentration of nominal income increases in the 6-9% range has led to lower real income expectations due to the expected continuation of double-digit inflation. In August 1979, 50 percent of all families expected prices to increase by more than their incomes during the year ahead (up from 45 percent in August 1978.).

Buying Attitudes Decline

In the August 1979 survey, 58 percent of all families reported that it was a good time to buy large household durables, down from 62 percent in May 1979 and August 1978. During the past year, there have been more substantial increases in unfavorable buying attitudes toward durables, moving from 17 percent in August 1978 to 27 percent in August 1979. Buy-in-advance psychology continues to play an important role in the durable goods market. In August 1979, 33 percent reported that it was a good time to buy since prices would only go higher in the future, slightly below the 35 percent recorded in both May 1979 and August 1978.

Buying attitudes toward automobiles have remained largely unchanged during the past year. In August 1979, 38 percent of all families rated buying conditions favorable for automobiles, compared with 39 percent in May 1979 and 40 percent in August 1978. The recent overall stability in buying attitudes towards automobiles has resulted from offsetting trends. Buy-in-advance psychology in the automotive market has now greatly diminished, with just 13 percent reporting this rationale in August 1979, down from 22 percent in May and 28 percent in August 1978. At the same time, favorable evaluations of market conditions for automobiles due to the availability of new fuel-efficient models has increased from 2 percent in August 1978 to 11 percent in August 1979.

Market conditions for houses declined somewhat in the August 1979 survey. Among all families, 46 percent rated buying conditions as favorable for houses in August, down from 51 percent in May 1979 and 50 percent in August 1978. Unfavorable ratings of buying conditions, largely due to increasing interest rates, have risen from 39 percent in August 1978 to 48 percent in August 1979. Although 30 percent of all respondents still mention buy-in-advance price rationales with regard to the housing market, an equal proportion felt current housing prices were too high and might fall later, and 27 percent felt high interest rates made current buying conditions unfavorable.

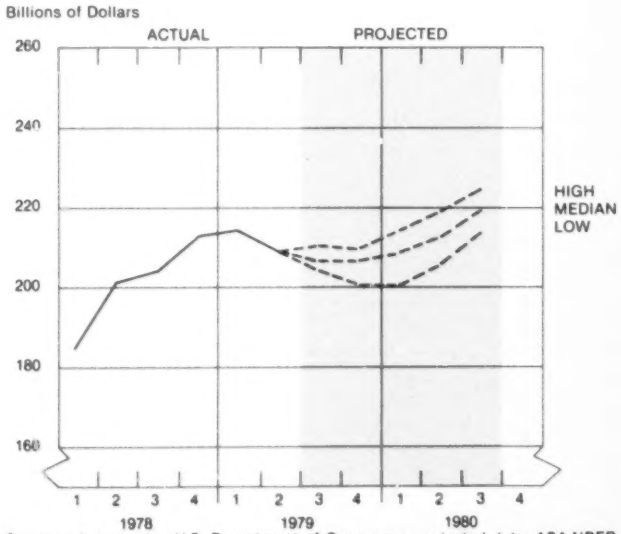
Summary Outlook

The decline in consumer confidence during the past year has been steep and widespread. Sharp declines in evaluations of business prospects have continued through late summer, dominated by heightened concern with growing unemployment. Slower rates of food price increases during the early summer months were reflected in somewhat improved personal financial attitudes.

The overall decline in sentiment has been less severe than that prior to the last recession, mainly due to the impact of buy-in-advance psychology. The rate of savings out of disposable income has remained below 6%, its long term average, since late 1976. In contrast, from 1970 to 1975 the quarterly saving rate fell below 6% only once. During the second half of 1979 and early 1980 continued cutbacks on consumer spending will result in savings rates moving back toward the 6% level.

September 1979

CONSUMER DURABLE OUTLAYS



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

Black and White Preferences about Residential Segregation

**Reynolds Farley, Howard Schuman, Suzanne Bianchi,
Diane Colasanto, and Shirley Hatchett
The University of Michigan**

Almost a decade ago, the Kerner Commission warned that this nation was moving toward two societies—one white and one black. Recent data on patterns of residential segregation in large metropolitan areas confirm this prophecy and indicate clear-cut boundaries for these two societies—large cities are becoming black and suburban areas are remaining white.

The Detroit metropolitan area is a case in point. In 1970 about 45 percent of the central city's 1.5 million residents were black, contrasting with only 4 percent black among the 2.5 million suburban residents. Since 1970 the city has become even more black. One measure of this is the racial composition of the public schools, which rose from 64 percent black in 1970 to 80 percent black in 1976.

This situation led us, as investigators for the 1976 Detroit Area Study (DAS) of the University of Michigan, to try to understand better the nature and causes of residential segregation in Detroit. We believe that our findings may be generalized to many of the nation's large metropolises.

Possible Explanations for Residential Segregation

Residential segregation has frequently been attributed to (1) racial differences in economic status, (2) racial prejudice among whites, or (3) preference of blacks to live among other blacks and not whites. But research has failed to show that any of these theories explain the persistence of racially separate communities. In recent years, racial differences in education have narrowed, and the income of blacks has risen slightly faster than that of whites. The proportion of whites in national samples who said they would not be upset if a black with an income and education similar to their own moved onto their block has more than doubled during the past 20-30 years and now stands at 80 percent or more. Finally, a variety of national and local studies suggests that blacks would rather live in racially mixed than in segregated neighborhoods—and this preference appears to have strengthened in recent years.

Since these explanations, as tested in previous studies, do not account for the persistence of racially separate communities, our study of racial segregation included several innovations in measurement. We focused our concern on three specific topics:

Economic factors and knowledge of the housing market. We realize that economic variables do not account for residential segregation, but we do not know how much information people have about the cost of housing and the financial capabilities of blacks. We wondered if blacks fail to seek suburban housing which they can afford because they overestimate its costs. We wondered if whites give liberal answers to the "Black on your block" question because they believed that very few blacks can actually afford homes in white areas. We also wished to determine if blacks and whites had similar ideas about which areas are attractive and if they share the same views of the hostility blacks would face if they moved into largely white suburban areas.

The residential preferences of blacks. Most previous investigations of the neighborhood preferences of blacks have used one question asking whether it is desirable to live in mixed or segregated neighborhoods. This provides insufficient information about the nature of black preferences, and thus we presented black respondents with diagrams representing varying degrees of interracial neighborhoods, asked their preferences, and then determined why they selected such neighborhoods. We assessed their willingness to move into neighborhoods of each type, and, if they were unwilling to enter an all-black or all-white neighborhood, we asked why.

The residential preferences of whites. We believe that the "Black on your block" question, which has traditionally been used in studies of the neighborhood preferences of whites, provides too little information. As Levine noted, it does not assess how whites would react in a variety of real and potential settings and does not assist in understanding a complex issue.[1] We presented white respondents with diagrams of a number of neighborhoods with different interracial mixtures. We asked if they would be uncomfortable in each of the neighborhoods and, if so, would they try to move away and why. We also determined their willingness to purchase a home in a racially mixed neighborhood.

Data were gathered in the spring and summer of 1976; the target population was heads or coheads of households living in year-round housing units in the Detroit area during April to July of 1976. Blacks were oversampled to increase their number available for analysis. A total of 734 whites and 400 blacks were interviewed, yielding response rates of 77.9 and 71.3 percent, respectively. Race of interviewer was controlled so that black respondents were always interviewed by blacks; white respondents, by white interviewers.

To check on the representativeness of our sample, we were able to compare the demographic characteristics of DAS respondents with those of residents included in the Census Bureau's March 1976 Current Population Survey (CPS). We found that the DAS and CPS samples were very similar with regard to age, educational attainment, sex of household heads, income, and race.

Note: This article is adapted from the authors' paper, " 'Chocolate City, Vanilla Suburbs:' Will the Trend Toward Racially Separate Communities Continue?," which appeared in *Social Science Research* 7, 1978: 319-344. (Permission granted by Academic Press, Inc.)

[1] R.A. Levine, "The Silent Majority: Neither Simple Nor Simple-Minded," *Public Opinion Quarterly* 35, 1971-72: 571-577.

Economic Factors and Knowledge of the Housing Market

To determine what knowledge people have about the housing market, we selected one area from the central city and four of the largest Detroit suburbs and asked several questions about each area. If race were not salient in the selection of housing, we expect that many whites would like to live in the northwest area of the central city and that many blacks would live in the suburbs. The locations have very different reputations, but in each the dwelling units are primarily single family homes.

We first wished to learn if blacks and whites accurately knew the cost of housing in these areas. We asked respondents their estimates of the average cost of homes in each area and then asked them whether they thought that only a few, about half, many, or almost all black families in the Detroit area could afford to live there.

It turns out that both blacks and whites were quite knowledgeable about the costs of housing. They correctly differentiated the suburbs, identifying the areas where housing is most and least expensive. In general, the average estimates of blacks and whites were similar for each of the locations, though the dispersion of estimates of suburban housing costs were greater for blacks than for whites, perhaps reflecting a lack of familiarity with that housing market on the part of blacks.

Do whites and blacks believe that many black families can afford to live within these areas? There is a major city-suburban difference in such perception. About 90 percent of respondents—black and white—believed that most blacks could afford the northwest section of the central city, but they saw differences in the ability of blacks to afford homes in various suburbs. More than half the white and black respondents thought that most black families could pay for housing in the two less expensive suburbs, while only a third to a half of each racial group saw the two more expensive suburbs as financially accessible to the majority of blacks.

These data suggest that blacks are quite well informed about suburban housing costs, and thus we reject the hypothesis that blacks do not live in the suburbs because they believe that all suburban housing is beyond their financial capacity. Blacks realize that the majority of blacks can afford to live in several of the suburbs we considered, and Detroit area whites are also cognizant of the financial capabilities of blacks. We infer that whites understand that the absence of blacks from the suburbs is not due to blacks being unable to afford housing there.

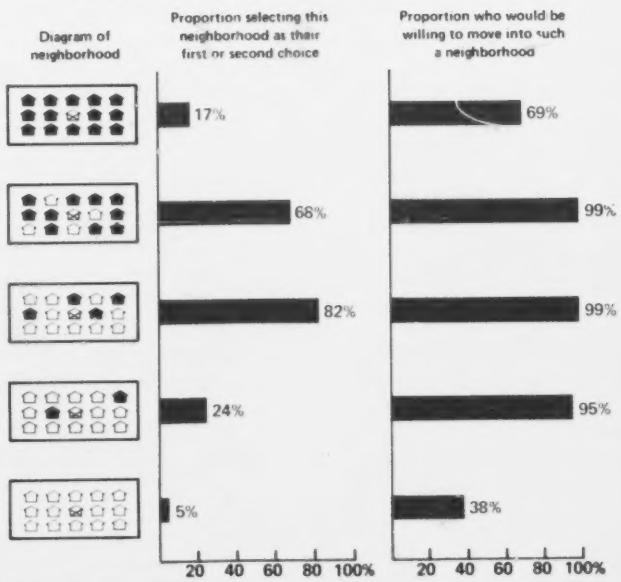
Integration Preferences of Blacks

Previous studies found that a majority of blacks expressed a general preference for integrated neighborhoods. To analyze more adequately the nature of these preferences, we developed a graphic measure that provided black respondents with five diagrams of neighborhoods. Each diagram shows 15 homes, but the racial composition of the neighborhoods varies from one diagram to the next. We asked respondents to imagine that they are looking for a house and have found one that they can afford. This house is designated as the center of each of the neighborhoods pictured. In the first card, all 14 other homes are occupied by blacks; while the fifth card represents a neighborhood which contains no black families. The other three cards show intermediate mixtures (see Chart 1).

Black respondents were asked to rank the neighborhoods from the one most attractive to them through the neighborhood that was least attractive. The left panel of Chart 1 reports these evaluations. We indicate the proportion of blacks who said the specific neighborhood was either their first or second choice. A very clear preference pattern emerged. Sixty-two percent selected the half-black/half-white neighborhood as their first choice and another 20 percent of the black respondents said it was their second choice. The second most popular was the area containing ten black and four white families. The neighborhoods with either two blacks or all blacks were favored by much lower percentages. The strongest aversion was to the all-white neighborhood, since only 5 percent placed it first and 63 percent ranked it as the least attractive area.

Respondents were asked to consider further the one neighborhood they found most attractive. Using an open-ended question we asked them to explain why they found it so. We anticipated that those choosing the 50/50 neighborhood would often state that city services were better or that physical conditions were more attractive in integrated areas, but only one-quarter of the black respondents gave these as their primary reason for wanting to live in mixed neighborhoods. The most frequently espoused view had to do with getting along with whites. About two-thirds of those blacks who preferred the 50/50 area gave reasons such as: "When you have different kinds of people around, children understand better," "I'd like my children to know different kinds of people," "I'd rather live in a neighborhood that is mixed—don't have any trouble, no hostility," "It might make it better to get along with white people." These results corroborate earlier findings which show that a majority of black respondents not only

Chart 1. NEIGHBORHOOD PREFERENCE OF BLACK RESPONDENTS



Source: *ISR Newsletter*, Summer 1979

favor residential integration but they do so because of a belief in racial harmony rather than a belief that services are better in mixed neighborhoods.[2]

For each type of neighborhood, we asked respondents whether they would be willing to move into it provided they found a nice house they could afford. The percentage of respondents indicating their willingness to enter these neighborhoods is shown in the right panel of Chart 1. Almost all blacks claimed they would move into neighborhoods which contained ten, seven, or two other black residents. Opposition to all black neighborhoods seemed strong, given the pervasive residential segregation of the Detroit area which leads most blacks to live in almost exclusively black areas. Thirty-one percent of the respondents said they would not move into a nice house in an all-black neighborhood. We also used an open-ended question to get at their reasons for this. About one-half of the respondents cited such problems as low property values, crime, vandalism, and difficulties with children in all-black neighborhoods.

Our data from the residential segregation questions and from several other racial attitude questions suggest that there is no strong ideological support in the Detroit black community for separate black neighborhoods nor do most blacks express antiwhite attitudes. We believe that, freed of the fear of racial hostility, most Detroit area blacks would select neighborhoods which are about one-half white and one-half black.

[2]Angus Campbell and Howard Schuman, *Racial Attitudes in Fifteen American Cities*, Institute for Social Research, The University of Michigan (Ann Arbor: 1968).

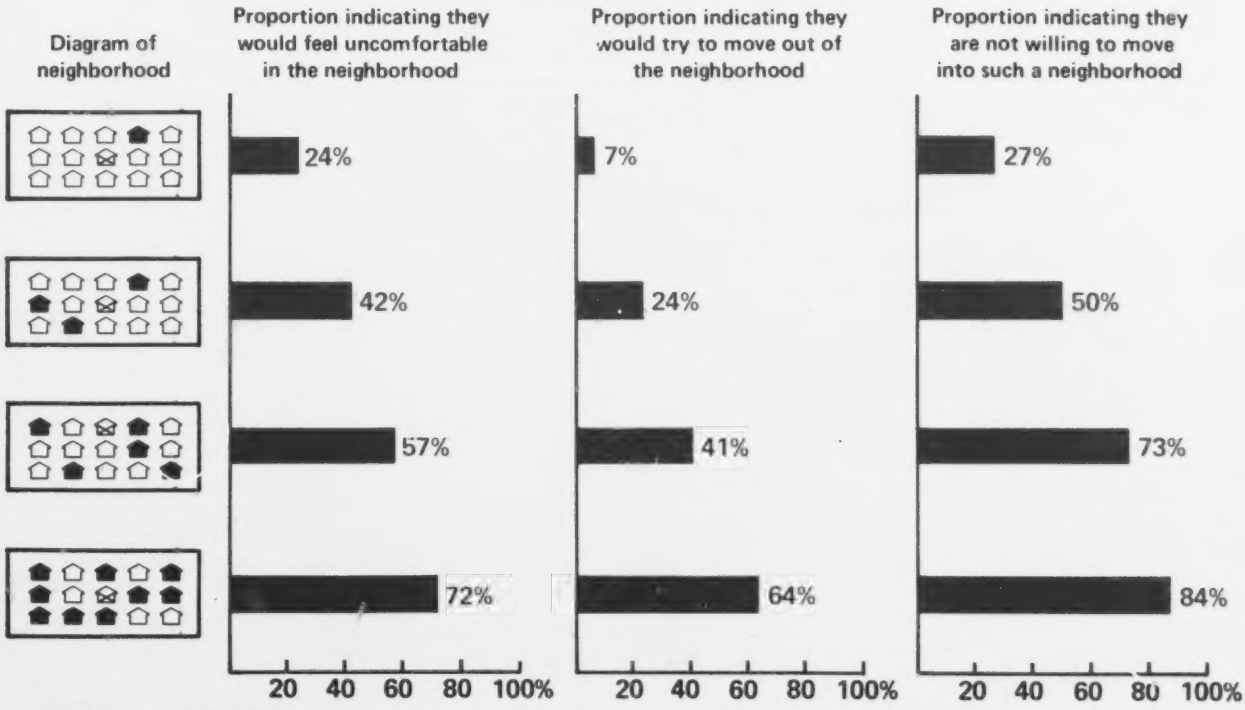
Integration Preferences of Whites

Residential segregation depends not only upon the willingness of blacks to enter largely white areas but also on the willingness of whites to remain in or enter neighborhoods where there are already black residents. The residential preferences of whites were studied in a manner similar but not exactly identical to that used with black respondents.

Each white respondent was presented with a series of five diagrams showing 15 homes. We asked them to imagine that they lived in an all-white area, using the center house as theirs (see the first diagram of Chart 2). Next, they were asked to imagine that a black family moved into the neighborhood. At this point, they were shown the second card which indicated one home occupied by blacks and 14 by whites. White respondents were asked how comfortable they would be in that neighborhood. They were then shown the third card which indicated that three black families lived in the neighborhood; next, a fourth card with five black families; and, finally, a fifth card which protrayed a neighborhood of eight black and six white families. (In pretests, we experimented with cards showing even higher densities of blacks, but almost no whites felt comfortable in such neighborhoods.)

The left panel of Chart 2 shows the proportion of white respondents who said they would be uncomfortable in each neighborhood. White resistance to mixed neighborhoods is very evident. Even in the situation of minimum integration—one black and 14 white families—one-quarter of the whites claimed they would be uncomfortable. As the proportion black rose, so too did discomfort among whites. In a neighborhood which was half black, 72 percent of the whites said they would be uncomfortable.

Chart 2. NEIGHBORHOOD PREFERENCE OF WHITE RESPONDENTS



Source: *ISR Newsletter*, Summer 1979

We asked those white respondents who reported being uncomfortable in a neighborhood whether they would actually try to move out. In the middle panel of Chart 2 we report the proportion who said they would attempt to leave each neighborhood. This proportion is quite low for the neighborhood which contains one black family—only 7 percent of the whites would try to leave—but increases rapidly. Forty percent say they would move away from a neighborhood which is one-third black and 64 percent would leave the majority black area.

The more than 400 white respondents who said they would move away from one of the neighborhoods were asked why they would do so. The modal explanation focused upon property values. That is, about 40 percent of the whites believed that the entry of blacks was tantamount to depreciating property values. The most common reasons were "they don't care about anything they own," and "because if I stayed longer, my home wouldn't be worth anything." The next most common explanation had to do with crime and safety. Some white respondents contended that crime rates in any area are directly proportional to the black population and that if there were many blacks, they would fear for their personal safety.[3] A related theme was reported by many whites who said they would feel out of place if they lived in a majority black neighborhood.

As a final question concerning residential preferences white respondents were asked to imagine they had been looking for a home and had found a nice one they could afford. The house could be located in the several types of neighborhoods shown on the cards presented to them. We asked them which neighborhoods they would consider moving into. The third panel of Chart 2 shows the proportion of whites who would *not* consider moving into each type of neighborhood.

The willingness of whites to enter a neighborhood is, as anticipated, inversely proportional to the representation of blacks in that area. However, there is some opposition to entering even the minimally integrated area. More than one-quarter of the whites said they would not consider a nice home they could afford if the area contained one black and 13 whites. Looking across Chart 2, we observe that if there are three blacks in the neighborhood, more than 40 percent of the whites would be uncomfortable, about one-quarter would try to move out, and one-half of the whites would not consider moving into such an area.

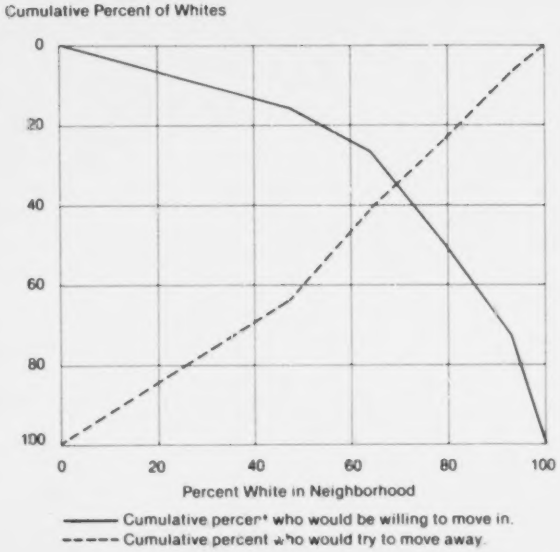
Tipping Points and Neighborhood Transition

There is a good deal of variation in the neighborhood preferences of the white respondents. While the majority of whites would not remain in a neighborhood that is mostly black, there are many whites who are willing to tolerate some representation of blacks in their neighborhoods. In evaluating the consequences of the preferences of whites for future trends in residential integration, it is appropriate to consider the distribution of white preferences in greater detail. Chart 3 shows the cumulative proportion of whites who would try to move out of and who would be willing to move into various neighborhoods. The horizontal axis corresponds to the proportion white residing in a hypothetical neighborhood. The vertical axis is the proportion of whites who say they would move into or away from each of the four neighborhoods pictured on our cards. In plotting these proportions for the entire range of hypothetical neighborhoods, we assumed that all whites would feel uncomfortable and would try to move out of a nearly all black neighborhood and that none would be uncomfortable in an all white neighborhood.

We can consider the point where the curve representing the proportion of whites who would move out intersects with the curve representing the proportion of whites who would enter the neighborhood to be a "tipping point." That is, all points to the left of this point along the horizontal axis have fewer whites willing to move in than planning to move out. We conceptualize this as a tipping point because as the proportional representation of blacks in a neighborhood increases beyond this point, the transition to an all black neighborhood is likely to accelerate. More whites begin to feel uncomfortable and try to move out, and there are fewer and fewer whites who are willing to replace them in a neighborhood with such a large representation of blacks.

According to Chart 3, we can define a 70 percent white/30 percent black neighborhood as the tipping point. This point represents the intersection of the "move out" and "move in" curves for whites and seems to imply that neighborhoods with greater than 70 percent white will remain stably integrated. For example, consider the point on the horizontal axis which represents a neighborhood which is 93 percent white—one black and 14 whites. We find that 76 percent of the whites would consider moving into such an area and only 7 percent would try to leave. We expect that such an area might remain racially mixed, for there are many whites willing to move in and replace those other

Chart 3. PROPENSITY OF WHITES TO MOVE INTO OR OUT OF NEIGHBORHOODS WITH VARIOUS RACIAL MIXES



[3]Recall that substantial numbers of blacks expressed similar qualms about moving into all-black neighborhoods.

whites who would leave. However, we know that stable integrated neighborhoods are rarely found in American cities. Schelling determined, through the use of mathematical models, that if the residential preferences of the white residents of a neighborhood differ, the dynamics of the situation will drive the proportion black successively over each individual's maximum tolerance, and the neighborhood will ultimately become a black residential area.[4] That is, although there are more whites who would move into a 93 percent white neighborhood than move out, if any of the vacancies created by the exodus of whites are filled by blacks—and almost all Detroit area blacks would consider moving into that type of neighborhood—some additional whites who were comfortable will become uncomfortable with the new racial composition. They may move and create new vacancies which may be filled by blacks. Therefore the proportion black will rise and other whites may decide to leave. As Schelling has demonstrated theoretically, it is precisely the variance that we observe in the neighborhood preferences of whites that causes neighborhoods to change from all white to all black. However, until the distribution of preferences by neighborhood is considered, it is difficult to determine if this pattern of neighborhood change is inevitable in Detroit.

The Prospects for Residential Integration

When we consider the residential preferences of whites in the Detroit area, the prospects for residential integration seem quite slim. Many whites are willing to tolerate some degree of racial integration in their neighborhoods, but the variance in white preference indicates that stable neighborhood integration is unlikely to occur. While the neighborhood preferences of blacks are considerably more favorable to residential integration than the preferences of whites—the overwhelming majority of blacks chose an integrated neighborhood as the one that is most attractive to them—even these data must be interpreted with a certain amount of pessimism. Since neighborhoods with equal numbers of black and white residents are not widely available and because there is a strong aversion to all-white neighborhoods, many blacks who state a preference for integrated neighborhoods may actually choose to live in largely black areas.

Consideration of data about the knowledge that blacks and whites have of the Detroit area housing market also leads to the conclusion that the prospects for residential integration are not good. We speculate that both blacks and whites are very knowledgeable about where they and the other race "belong" and that real estate marketing practices reinforce these judgments, primarily by steering blacks and whites to separate areas. For instance, our investigation finds that almost all Detroit area residents are aware of the antiblack reputation of Dearborn and, we presume, few blacks would try to enter that suburb. Whites, on the other hand, define the northwest corner of the central city as black and probably do not seek housing there even if it is readily available at an attractive price. We presented the following hypothetical situation to all respondents:

> "I'd like you to imagine that you're going to move. You have a choice of buying two houses that are identical, except that one is located in northwest Detroit and the other is located in a desirable suburb. The house in the suburb costs $8000 more than the house in Detroit. Which of the two houses would you choose to move into?"

Given these alternatives, 90 percent of the whites selected the suburban home while 75 percent of the blacks selected the one in the city. Although endorsing the ideal of residential integration and expressing some willingness to live in racially mixed areas, we believe that many whites would actually spend large sums of money to avoid living in an area which they believe "belongs" to blacks such as the northwest section of the central city.

Blacks are equally knowledgeable about housing costs and the openness of various areas to them. They realize that whites in each of the suburbs would be more upset by their entry than whites in the central city. For these reasons many blacks who endorse the ideal of integrated housing may avoid the suburbs and seek homes in those parts of the city which are now undergoing racial transition.

These data indicate that the likelihood of achieving stably integrated neighborhoods in the Detroit area is small. But before arriving at this conclusion, we wondered if we could identify groups of the population who were favorable to integration and whether this might portend an eventual reduction in residential segregation. Perhaps young and well-educated blacks and whites have residential preferences which will lead to integration. Scores reflecting racial residential preference were developed for whites and blacks. A multivariate analysis related these scores to the following background variables: age, educational attainment, family income in 1975, and residential closeness to the other race. No strong or significant associations were found.

We believe that residential preferences are not strongly or substantially related to these or to other background factors, and thus we were unable to identify groups of the white or black population who have distinct residential preferences. There seems to be little hope that attitudes about neighborhood integration will change rapidly because of increases in educational attainment or because "conservative" older whites are replaced by "liberal" younger persons. However, it is possible that the preferences of whites and blacks can change for other reasons. Just as the attitudes of whites about school integration and the integration of public facilities are much more liberal now than before the federal government began to take action against these types of segregation, so the attitudes of whites about neighborhood integration may change rapidly as blacks begin to be more dispersed in the metropolitan area. Until we know more about the sources of these preferences for whites and blacks, it is difficult to specify what kinds of changes are likely to occur in the distribution of neighborhood preferences.

[4] T.C. Schelling, "Dynamic Models of Segregation," *Journal of Mathematical Sociology* 1, 1971: 148-186; "A Process of Residential Segregation: Neighborhood Tipping," in *Racial Discrimination in Economic Life*, A.H. Pascal, ed., Heath (Boston, 1972).

Public Attitudes Toward Michigan's Tax Proposals and Government Expenditures

Ann Hendricks
Survey Research Center
The University of Michigan

The passage of California's Proposition 13 in June 1978 led some to predict a national tax revolt. By November 1978, 22 proposals to lower or limit taxes were on the ballots in 17 states. Of these, 14 were passed, giving 13 states some type of tax limitation or reduction at the local or state level. Michigan's ballot listed three such proposals: one to limit the growth of state expenditures (Headlee), one to lower property taxes (Tisch), and one to change the form of payment for local schools to include a voucher. The Tisch proposal was similar in spirit, although not identical in detail, to California's Proposition 13. The Headlee limitation proposal passed by a margin of 52 to 48 percent; the Tisch and Voucher proposals failed, 63 to 37 percent and 74 to 26 percent, respectively.

Was Proposition 13 the start of a tax revolt? In a survey conducted just after the November 1978 election, a representative sample of Michigan adults was questioned about the election and about their preferences for state and local government expenditures. Voters were asked whether they voted for or against each of the tax proposals; nonvoters were asked whether they favored or opposed the passage of each. Respondents were also asked what results they expected from passage of each proposal, whether they preferred increased or decreased government spending in six major program categories, and whether they preferred changes in overall government expenditures at the state or local level. The answers to these questions present an opportunity to examine citizen demands for tax reform at the state and local level.

The Tax-Related Proposals

Of respondents in the survey, 58 percent reported they had voted in the November election. Among these, the survey results correctly indicated the passage of Headlee and the defeats of Tisch and the school voucher proposal. Table 1 shows the patterns for voters and nonvoters who expressed preferences on all three proposals. Among those who cast ballots in the November election, 43 percent voted for the passage of just one of the three proposals, and an additional 28 percent voted for two or more. Just 29 percent of all voters opposed all three proposals. Nonvoting respondents differed from voters in that nonvoters more frequently favored passage of one or more of the proposals, especially the Voucher plan. If all nonvoters had voted, however, these differences in preference would not have changed the election outcome.

Of voters who favored passage of the Headlee proposal, the majority did not favor any other proposal. In contrast, more than half of those who voted for either the Tisch or Voucher proposals also voted for one or both of the other proposals. The pattern indicated that the support for the Headlee proposal was largely independent of the appeal of the other two proposals.

Table 1. PREFERENCE PATTERNS FOR RESPONDENTS EXPRESSING AN OPINION ABOUT THREE TAX PROPOSALS

Preference Pattern	Voters	Nonvoters
Favored only Headlee	30%	24%
Favored only Voucher	8	17
Favored only Tisch	5	12
Favored Headlee & Voucher	8	11
Favored Headlee & Tisch	8	10
Favored Voucher & Tisch	3	7
Favored all three	9	8
Opposed all three	29	11
	100%	100%

Expected Effects of Proposals

After the vote or preference for each tax proposal was ascertained, each respondent was asked what effects passage might have. As shown in Table 2, voters who favored passage of each of the tax proposals were more likely to expect reduced taxes after passage than those who opposed passage, while the latter more frequently expected higher income taxes or less money for public schools. A greater proportion of voters for the Tisch and Voucher proposals felt they would lead to reduced overall taxes than was true for Headlee supporters.

The more widespread expectation of reduced taxes among supporters of the Tisch and Voucher proposals was clearly not shared by the majority, who opposed these proposals. Those in favor of Headlee and against Tisch felt that lower overall taxes would result as frequently from Headlee as Tisch, and were less likely to expect higher income taxes or lower property taxes as a result of passage of Headlee compared with Tisch. It appears that the appeal of the Headlee proposal stems more from a balance of expectations for somewhat lower property taxes, smaller increases in income taxes, and fewer reductions in government employees or local school financing. Voters favoring Headlee were the least likely to expect its passage to lead to less money for public schools.

Table 2. VOTERS' EXPECTATIONS FOR RESULTS OF PASSAGE OF EACH TAX PROPOSAL

Percentage agreeing that proposal would result in.....	Vote on Headlee		Vote on Tisch		Vote on Voucher	
	Yes	No	Yes	No	Yes	No
Lower overall taxes	32%	13%	66%	36%	66%	10%
Lower property taxes	36	20	78	53	49	27
Fewer government employees	41	37	58	50	41	23
Smaller government wage increases	48	41	53	50	39	28
Less money for schools	32	50	52	65	53	66
Higher income taxes	56	67	65	74	68	73

When asked to describe the most important effect of the proposals, almost two-thirds of those voting for Headlee mentioned reducing or limiting taxes or more efficient government. The Headlee amendment was most frequently seen as aimed at tax limitation; the Tisch proposal at tax reduction; and the Voucher proposal at supporting private schools.

Preferences for Expenditures

How do the outcomes of the votes on the three proposals compare with respondents' stated preferences for change in state and local government expenditure programs? Each respondent was asked whether spending should be increased or decreased on six categories that represent the current major expenditure areas for Michigan governmental units.

In 1976-77, the six program areas used two-thirds of all state and local expenditures. Welfare was the largest category in the state budget (37% of all state expenditures), followed by the state colleges and universities (22%). At the local level, the public school systems dominated the budgets (44%) with no other category of such major importance.

From Table 3 it can be seen that the only category for which a majority wanted more spending was road repair (51 percent). The only program expenditure that a majority wanted to decrease was welfare payments (63 percent). Although for police, parks, and school programs, the most frequent response was to leave spending levels unchanged, a quarter to a third of respondents supported expanding each of these programs. With welfare programs the only exception, spending more rather than less was the more frequent response.

To assess the strength with which these preferences were held, respondents who indicated more should be spent on a particular program were also asked if they would still favor this increase if their own taxes were raised. The majority of respondents who favored increases in particular spending programs were also willing to pay increased taxes for them.

Despite the prospect of increased taxes, more than one in four Michigan adults still favored spending more on five major program areas: road repair, public schools, state colleges, parks, and police and fire. Yet when asked whether they favored an overall increase or decrease in state and local government spending, just 11 percent favored an overall increase, while 33 percent favored overall declines.

Table 3. PREFERENCES FOR CHANGE IN STATE AND LOCAL GOVERNMENT EXPENDITURE PROGRAMS

	State and local governments should spend...					
			More...			
Program area	Less	Same amount	With no tax increase	With tax increase	Not ascertained	Total
Welfare payments	63%	25%	3%	6%	3%	100%
Public schools	15	44	6	32	3	100
Parks & recreation	10	56	8	24	2	100
State colleges	10	49	7	27	7	100
Road repair	6	41	16	35	2	100
Police and fire	3	58	6	31	2	100

Since the expansive program preferences remained, even in the presence of increased taxes, the apparent contradiction in preferences is heightened. Several factors, however, caution against interpretations of consumer irrationality. Most respondents favored increases in only one or two program areas and declines in one program on average. Further, a clear majority want less welfare spending, which accounts for a substantial part of the total budget.

Table 4 shows respondents' preferences on changes in state and local expenditures. On each question, more than half wanted no change in expenditures or taxes. Just over a third of all respondents wanted no change at either level. Another 32 percent wanted a decrease in the state-local spending ratio either by holding local expenditures constant and lowering the state's share (20 percent) or by holding state spending constant and raising local governments' share (12 percent).

Table 4. PREFERRED CHANGE IN STATE VERSUS LOCAL EXPENDITURES AND TAXES

Preferred change in state expenditures and taxes	Preferred change in local expenditures and taxes				
	Less	No change	More	Not ascertained	Total
Less	10.9%	20.2%	2.4%	1.1%	34.6%
No change	4.2	34.3	11.9	.9	51.3
More	0.2	3.2	6.2	.4	10.0
Not ascertained	0.6	1.7	1.3	.5	4.1
Total	15.9	59.4	21.8	2.9	100.0

Conclusions

Although the number of proposals to limit or lower taxes that appeared on ballots across the nation in 1978 is a clear indication that citizens are concerned about the level of their taxes, the Michigan survey results suggest that:

1. Michigan voters were voting for tax *limitation,* not tax *reduction.* This is supported both by their expectations of the outcomes of the Headlee and Tisch proposals and by their stated preferences for more or less state and local expenditures and taxation. Just 32 percent of those who voted for the Headlee proposal expected reductions in overall taxes. The majority of voters expected income taxes to increase as a result of passage of any one proposal. Consequently, these proposals hardly represent a tax revolt.

2. Distrust of government and belief that government was inefficient played a role in the vote for Headlee. Whether these had a more substantial impact on the vote than self-interest over higher taxes is unknown at present.

3. Many citizens express unmet demands for public goods in specific program areas. This appears to be largely a demand for a changed mix of publicly-provided goods since respondents were not generally in favor of expanded state and local budgets. The shifts are both between expenditure programs and from state to local governments.

It appears that Michigan citizens want more goods and services from their state and local governments, but not at a high tax cost which they associate with government waste and inefficiency. These results may not apply beyond the state, however, since Michigan differs from many other states in its industrial base, strong union tradition, and history of an expansive government sector.

Money, Goods, and Time: Alternative Ways to Monitor Social Change

F. Thomas Juster
Director, Institute for Social Research
Professor of Economics
The University of Michigan

Are people in the United States better off now than they were ten years ago? Are people in West Germany or Sweden better off than people in the U.S.? Are young people in the U.S. better off now than a decade ago?

Social scientists provide both simple and more complex answers to these apparently straightforward questions. Several decades ago, the most common way to answer any of these questions would have been to compare some measure of money income, or money income adjusted for price change, for the groups in question, on the grounds that differences in real income (i.e., command over goods and services) were a reasonable reflection of differences in well-being—in rank order if not quantitative terms. Typically one would add the caveat that what mattered to well-being was clearly psychological satisfactions, and that command over goods and services was only an indirect representation of those unobservable utilities or satisfactions.

During the last decade or so, social scientists have been increasingly dissatisfied with the assumption that a simple association exists between command over goods and services and well-being. In part, this dissatisfaction arises from the perceived inadequacy of GNP-type measures for representing command over goods and services; in part, from a growing perception that many important dimensions of well-being simply are not adequately reflected by any measure of goods and service flow.

The dissatisfaction with the GNP or equivalent measures basically follows from the recognition that GNP omits a lot of things that should be included in any comprehensive measurement of goods and service flows: unpaid household production activities, for example, are not part of GNP, nor are benefit flows from environmental assets like air, water, and climate, nor (with the exception of housing) are the services of durable assets owned by consumers.

In addition, GNP measures suffer from two other serious deficiencies. First, they do not distinguish well between goods and services that provide current consumption enjoyments to the population, and those which add to the stock of capital assets with a resulting potential for enhancing future consumption enjoyments. For example, neither the household nor the governmental sectors of the economy even have capital accounts in the GNP data. Thus new automobiles and highways are treated as current consumption rather than investment, outlays for schooling (teachers and buildings) are treated as current consumption outlays and not as adding to the stock of skills in the population, and so on. Similarly, basic research and development outlays of both business and government are counted as current costs of doing business rather than as activities that add to the stock of knowledge. All told, our current economic accounts misclassify a significant number of activities that are geared to the provision of future rather than current consumption flows.

Second, the present GNP accounts do not do a very effective job of distinguishing ultimate products of the economic system from intermediate products—those which play an instrumental rather than direct role in the production of material well-being. For example, we use resources for national defense in order to maintain or improve national security, but we measure resource use (an instrumental product) and not the security obtained (a final product).

Social Indicators

The intermediate or instrumental nature of many of the goods and services produced by the economy is one of the principal reasons for the developing interest of social scientists in what are commonly called social indicators. The basic idea is simple enough: the economic accounts measure the payment of teachers' salaries and the building of school facilities, but what matters to well-being is the production of skills among students, which is not measured; the accounts measure medical care in the form of payment to doctors and medical supplies, but what matters to well-being is the health status of the population, which is not measured; the accounts measure the production of housing structures, sidewalks and streets, but what matters to well-being is the quality of the neighborhood, which is not well measured by those tangible asset figures; the accounts measure hours of employment, but what matters to people is financial security during their working lifetime and during retirement, which is not well measured by current employment; and so on. And even proceeding beyond these objectively measurable indicators, many would argue that the appropriate measure of performance for the economic and social system must be concerned with the way in which people perceive those objective conditions, in short, with the ultimate psychological satisfactions that accrue to members of the population rather than with indirect indicators of those satisfactions.

Social Accounts

The development of our economic accounting system, which records GNP-type goods and services, and the development of social indicators, which attempt to get closer to ultimate products of the economy and ultimate outcomes for society, have largely proceeded without much reference to each other. Clearly, the economy has something to do with the level of various social indicators, although there are important social indicator measures which are hardly impacted at all by developments in the economy. For example, networks of social relationships within family and community groups have a good deal to do with the overall satisfaction of individuals with the quality of their lives generally, but those measures are hardly impacted at all by conventional economic variables of the GNP type.

One way to think about the appropriate dimensions of a comprehensive system of social accounts is to recognize that we need to keep track of a variety of resource inputs, including but not limited to GNP-type goods, a set of measurable outcomes that reflect end results rather than instrumental products or activities, and a set of perceived outcomes that reflect the psychological utilities derived from the measurable outcomes. In addition, we need to create various sets of behavioral linkages—between resource inputs and measurable outcomes, and between measurable outcomes and perceived satisfactions from those outcomes.

Society generally has only two types of resources at its command. The first is the total amount of time available for allocation to various activities, including working in the market for pay, while the second is the stock of accumulated capital assets. Total available time comprises the 24 hours in a day (multiplied by the number of days in the accounting period), while the available stock of "capital" consists not only of GNP-type tangible capital assets but also the stocks of skills in the population, stocks of personal associations built up over an individual's lifetime, stocks of organizational capital built up in the society (the political system, the judicial system, etc.), and stocks of environmental assets with which society has been bestowed. Those two constraints—total available time and inherited capital—represent all of the resources available to society for modifying its existing state of well-being.

In a system of this sort, GNP-type goods and services play a well-defined and important role. Such goods are produced by a combination of time allocated to the market plus the services of capital goods used within the market. Most such goods or services are then combined with non-market household time to produce various "outputs" of the household—child care, meals, neat and orderly living quarters, leisure activities, satisfying relationships with spouses, children, neighbors, and others, and so on. As an illustration, government inputs of teachers and school buildings, along with inputs of parental time, other consumer goods, and time spent by students, produce the outputs of additional skills and knowledge, along with other outputs like socialization. Other GNP-type goods produced by the public sector provide outputs directly by modifying certain conditions of society, for example, a distribution of income which is different than it would have been in the absence of government.

One interesting element of the system relates to a particular type of outcome measure that has traditionally been ignored by those focusing on GNP-type goods and service flows or on social indicator measures reflecting societal outcomes. Every activity that individuals do provides two kinds of impacts on well-being: the first is extrinsic—the income produced from working in the market, the quality of the meals resulting from the combination of inputs of purchased foods and time spent in cooking and meal preparation, the sense of order and beauty resulting from spending time and using materials in cleaning and maintaining the interior of the home, and so on; the second benefit is the intrinsic satisfaction that comes from the activity itself, which can be thought of as being either positive or negative. The intrinsic benefit, which might be labeled a process benefit, attaches to each and every activity that individuals do, and simply reflects the amount of enjoyment or satisfaction that people get from the activity, quite independently of whatever product (income, gourmet meals, orderly houses) results from the activity itself.

Although the principal use of this system lies in its conceptualization of the way in which social and economic phenomena relate to well being, a future article will discuss some rudimentary empirical implementation of the concepts presented here.

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Actual and Projected Economic Indicators

seasonally adjusted

SERIES FORECAST BY THE ASA-NBER PANEL															
ECONOMIC INDICATOR	Quarterly Data												Annual Data		
	Actual								Projected				Actual		Proj.
	1977:4	1978:1	1978:2	1978:3	1978:4	1979:1	1979:2	1979:3	1979:4	1980:1	1980:2	1980:3	1977	1978	1979
GROSS NATIONAL PRODUCT	1971	2011	2104	2160	2235	2292	2329	2366	2400	2442	2500	2568	1900	2128	2347
GNP IMPLICIT PRICE DEFLATOR (index, 1972=100)	144.8	147.1	150.8	153.5	156.7	160.2	163.8	167.6	171.0	174.3	178.0	181.0	141.7	152.0	165.7
GNP IN CONSTANT DOLLARS (billions 1972 $)	1361	1368	1395	1407	1427	1431	1422	1413	1402	1398	1405	1418	1341	1399	1417
INDUSTRIAL PRODUCTION (index, 1967=100)	140.3	140.8	145.1	147.9	150.7	152.2	151.8	149.5	147.0	146.0	147.0	149.0	138.1	146.1	150.1
UNEMPLOYMENT RATE (quarterly measure, percent)	6.60	6.20	6.00	5.97	5.83	5.73	5.73	6.0	6.5	7.1	7.3	7.2	7.03	6.00	5.99
CORPORATE PROFITS AFTER TAXES	107.9	106.7	122.4	124.6	132.3	142.0	138.6	135.0	130.0	131.0	135.0	140.0	104.5	121.5	136.4
EXPENDITURES FOR NEW PLANT and EQUIPMENT	138.1	144.3	150.8	155.4	164.0	165.9	173.5	174.0	178.0	178.0	181.0	184.0	135.7	153.6	172.9
NEW PRIVATE HOUSING UNITS STARTED (millions)	2.090	1.805	2.102	2.044	2.078	1.615	1.838	1.70	1.58	1.59	1.65	1.73	1.963	2.007	1.683
CHANGE IN BUSINESS INVENTORIES	18.5	22.8	25.8	20.0	20.6	19.1	34.6	20.0	14.0	10.0	8.2	12.0	21.9	22.3	21.9
CONSUMER DURABLE EXPENDITURES	186.4	185.3	200.3	203.5	212.1	213.8	208.1	206.0	206.0	208.0	212.0	219.0	178.8	200.3	208.5
NATIONAL DEFENSE PURCHASES	96.4	97.6	98.2	99.0	101.2	103.4	106.0	108.0	112.0	114.0	116.0	119.0	93.7	99.0	107.4

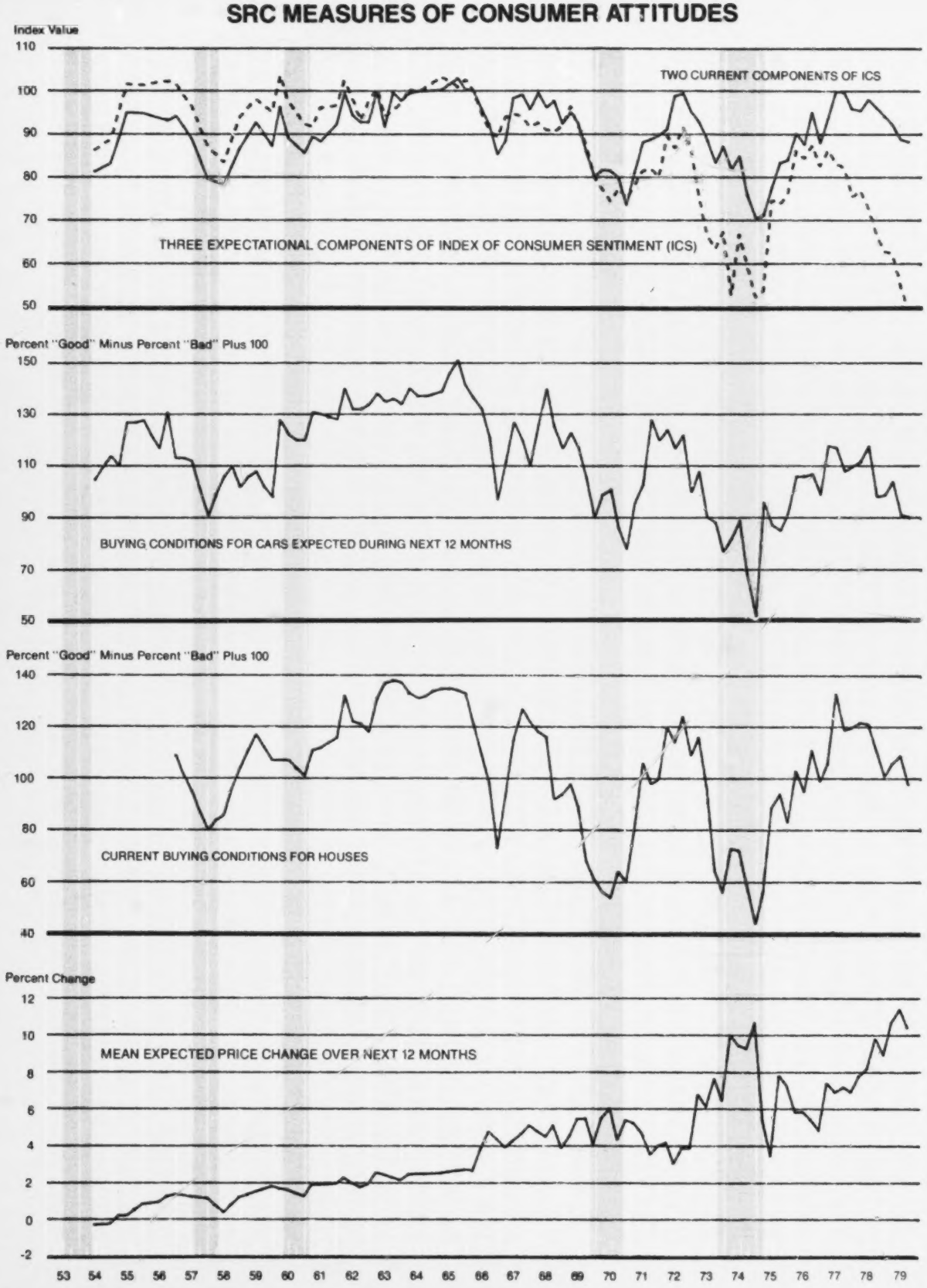
SERIES FROM THE GROSS NATIONAL PRODUCT ACCOUNTS															
ECONOMIC INDICATOR	Quarterly Data												Annual Data		
	1976:4	1977:1	1977:2	1977:3	1977:4	1978:1	1978:2	1978:3	1978:4	1979:1	1979:2	1979:3	1976	1977	1978
GROSS NATIONAL PRODUCT	1756	1820	1876	1931	1971	2011	2104	2160	2235	2292	2330	2392	1702	1900	2128
PERSONAL CONSUMPTION EXPENDITURES	1132	1169	1191	1221	1260	1287	1331	1369	1415	1454	1476	1529	1090	1210	1351
DURABLE GOODS	162.9	174.3	175.7	178.9	186.4	185.3	200.3	203.5	212.1	213.8	208.7	213.7	157.4	178.8	200.3
NONDURABLE GOODS	458.1	467.7	475.5	483.0	499.2	505.9	521.8	536.7	558.1	571.1	581.2	602.5	443.9	481.4	530.6
SERVICES	511.0	527.1	539.3	558.7	574.1	596.0	609.1	629.1	645.1	669.3	686.0	712.4	488.5	549.8	619.8
GROSS PRIVATE DOMESTIC INVESTMENT	250.7	280.4	300.0	315.7	316.9	327.0	352.3	356.2	370.5	373.8	395.4	392.1	243.0	303.3	351.5
NONRESIDENTIAL	172.2	179.8	186.1	193.2	198.6	203.7	218.8	225.9	236.1	243.4	249.1	257.2	164.9	189.4	221.1
RESIDENTIAL STRUCTURES	76.8	81.3	91.4	95.0	99.9	100.5	107.7	110.2	113.7	111.2	112.9	114.9	68.1	91.9	108.0
CHANGE IN BUS. INVENTORIES	1.7	19.3	22.5	27.5	18.5	22.8	25.8	20.0	20.6	19.1	33.4	20.0	10.1	22.0	22.3
NET EXPORTS	3.2	-9.2	-6.0	-6.3	-18.1	-22.2	-7.6	-6.8	-4.5	4.0	-8.1	-5.3	8.0	-9.9	-10.3
GOVERNMENT PURCHASES	370.3	380.0	391.6	400.5	412.8	419.4	428.3	440.9	453.8	460.1	466.6	476.2	361.3	396.2	435.6
GNP IN CONSTANT DOLLARS (billions 1972 $)	1223	1250	1286	1323	1361	1395	1437	1477	1525	1572	1602	1637	1185	1305	1458
PERSONAL SAVING RATE (% of disposable income)	5.2	4.2	5.1	5.4	5.1	5.3	5.0	4.8	4.7	5.0	5.4	4.1	5.8	5.0	5.0

Note: All data are at annual rates and in billions of current dollars unless otherwise indicated.

Sources: Projections: American Statistical Association — National Bureau of Economic Research panel of forecasters. (Forecasts were released in August 1979.)

Actual Data: U.S. Departments of Commerce and Labor, Board of Governors of the Federal Reserve System.

SRC MEASURES OF CONSUMER ATTITUDES



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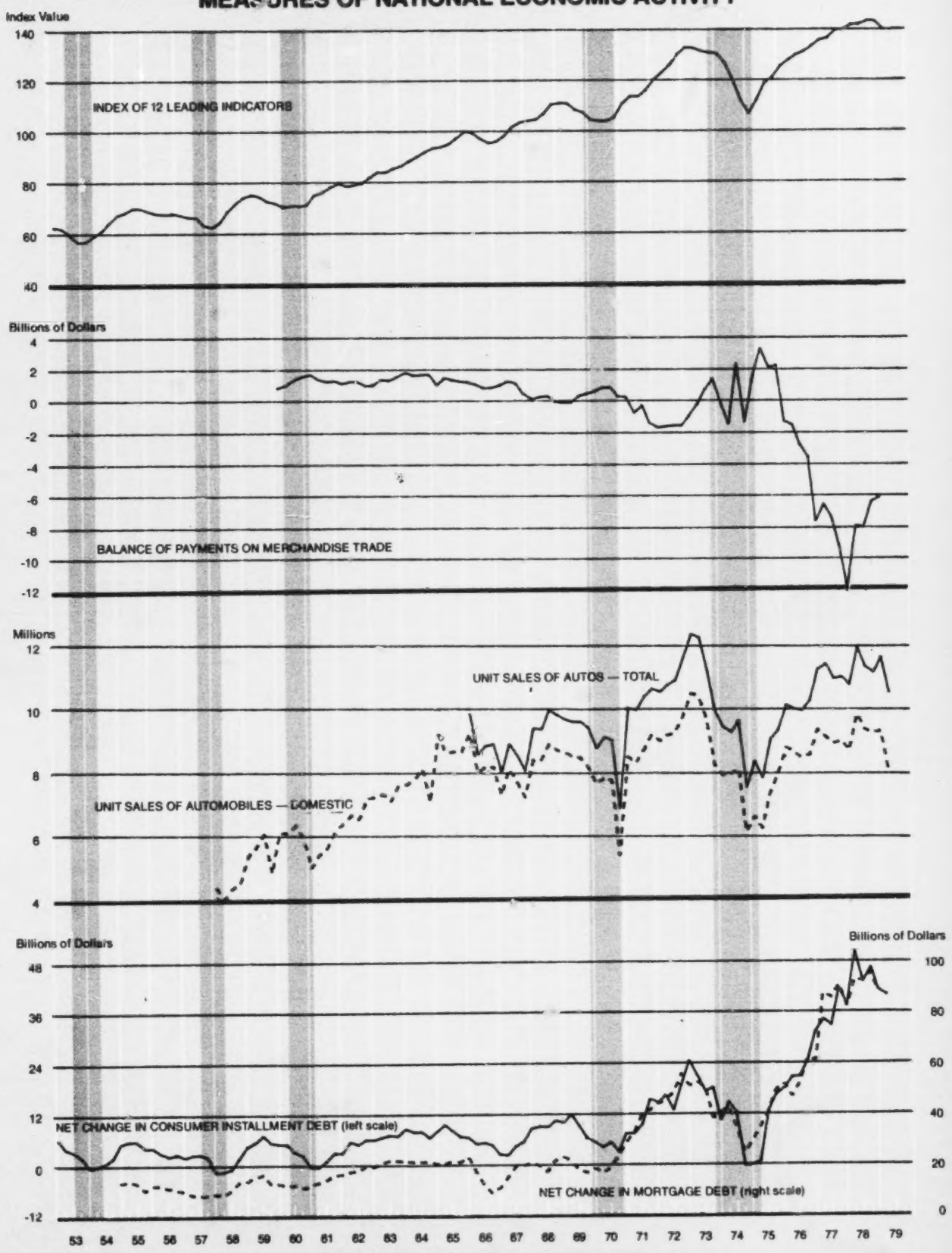
MEASURES OF NATIONAL ECONOMIC ACTIVITY



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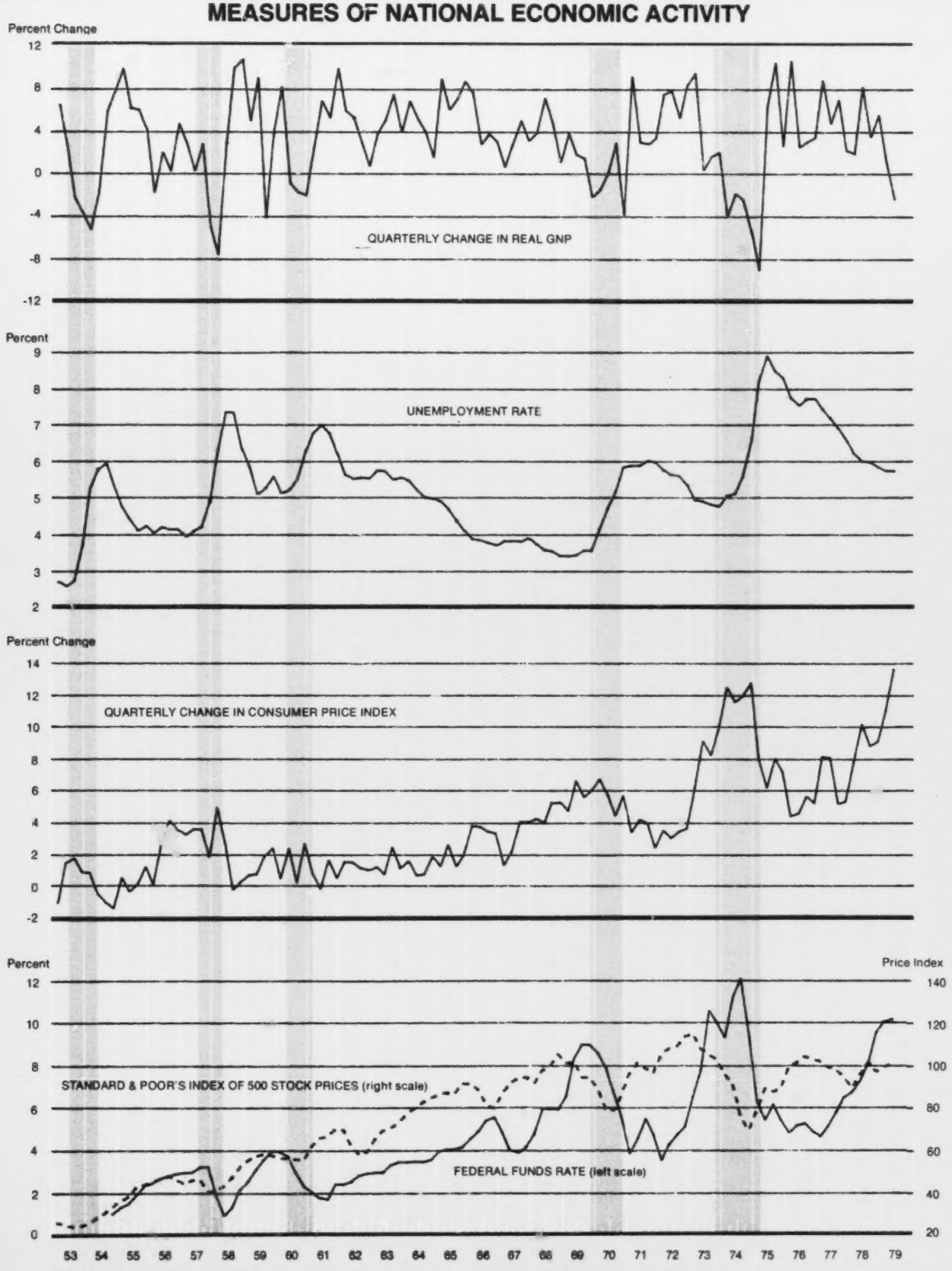
MEASURES OF NATIONAL ECONOMIC ACTIVITY



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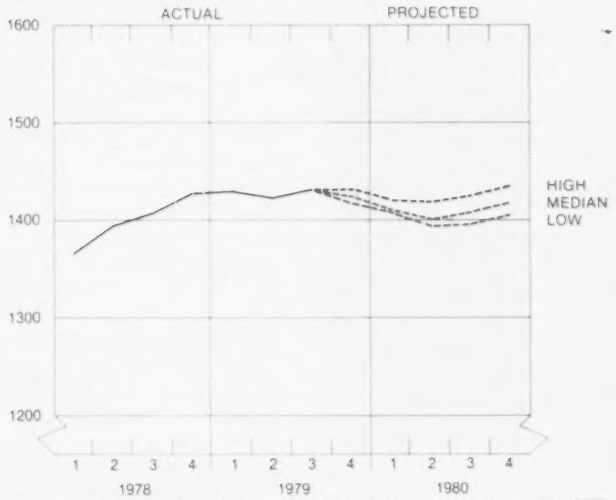
ECONOMIC PROSPECTS

Actual and projected; seasonally adjusted quarterly data at annual rates

GROSS NATIONAL PRODUCT

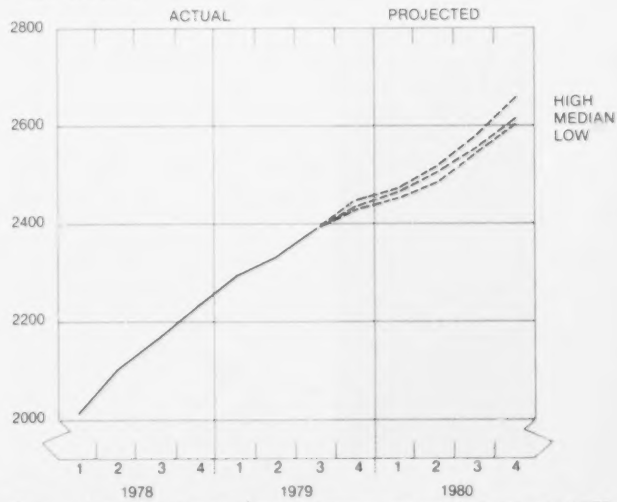
IN CONSTANT 1972 DOLLARS
Billions of Dollars



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

GROSS NATIONAL PRODUCT

IN CURRENT DOLLARS
Billions of Dollars



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

Frequently Used Abbreviations:

ASA	American Statistical Association
BEA	Bureau of Economic Analysis, U.S. Department of Commerce
NBER	National Bureau of Economic Research
SRC	Survey Research Center
197*x:y*	*y*th quarter of 197*x*

The U.S. Economic Outlook for 1980

Saul H. Hymans, Harold T. Shapiro, and Joan P. Crary
Department of Economics
The University of Michigan

Review of the 1979 Forecast

Although the unfolding of a series of unusual and sometimes puzzling economic events in recent years has made traditions in economic forecasting somewhat suspect, we will set the stage for our forecast of the coming year with a careful appraisal of last year's predictions. We recall first our predicted increase in real GNP of just over $28 billion, which compares to an increase which we now estimate at $29.6 billion for calendar 1979. Thus, in terms of the aggregate level of output of goods and services for 1979, our forecast was very accurate indeed. With respect to the two other key indicators of aggregate economic activity, the rate of price inflation and the unemployment rate, our forecasts were less accurate. A year ago we forecast a modest increase in the rate of inflation—measured by the GNP deflator—to a level of 7.7 percent for 1979 as a whole. This falls well short of our current estimate of an 8.9 percent rate of inflation for 1979. With respect to the unemployment rate, our forecast of a year ago anticipated an increase of 6/10 of a percentage point to a level of 6.7 percent. We now estimate a slight decrease in 1979 compared to 1978, to a level of about 5.9 percent for the year as a whole.

The sources of these forcast errors as well as the overall nature of our forecast for 1979 can be better appreciated by considering the data presented in Table 1. As indicated by these data, our forecast correctly predicted the sharp slowdown in the rate of growth of real GNP from the 4.4 percent experienced in 1978 to about 2 percent for 1979. Our forecast error with respect to the rate of inflation can largely be attributed to our failure to anticipate the very sharp increases in farm prices, import prices, and crude materials prices. These latter increases, of course, are dominated by the sharp increases in crude oil prices. A year ago we anticipated that OPEC actions would produce an increase of only 10 - 12 percent in world oil prices. In fact, it now appears that the price of our oil imports rose by about 65 percent from 1978:3 to 1979:3. Our overprediction of the unemployment rate, despite our accurate prediction of the level of production, can be traced to our overestimate of productivity. A year ago we forecast a modest increase of 1.3 percent in output per hour in the private non-farm sector. We now anticipate, however, a *decrease* of 1.0 percent for the current year. This poor productivity performance allowed the creation of more jobs than we anticipated in conjunction with the correctly forecast level of aggregate production.

Our overall forecast for 1979, discussed in the Winter 1978-79 issue, could also be classified as "mainstream." At the end of last year most private forecasters were predicting that the rate of growth of real GNP would decline to the range of 1.5 - 2.5 percent. The corresponding forecasts of the unemployment rate ranged from 6⅓ percent to 7¼ percent—all too high—and nearly all underpredicted inflation with forecasts between roughly 7½ percent and 9 percent. An interesting contrast, on the other hand, is available when our forecast is compared with those published by the Congressional Budget Office and the Council of Economic Advisers. In January of this year, the CBO forecast anticipated that real GNP would increase by 3 - 5 percent from 1978:4 to 1979:4, and the CEA Annual Report estimated 2 - 2½ percent growth for the same period. Our own forecast was for real growth of one percent from 1978:4 to 1979:4, and we now estimate that the rate of growth of real GNP will amount to about 4/10 of one percent for the year ending in 1979:4.

Table 1. REVIEW OF MQEM FORECAST FOR 1979: GNP, PRICES, AND UNEMPLOYMENT

	1978	1979	
Economic Indicator	**Actual**	**Actual[a]**	**Projected[b]**
Rates of Growth (percent):			
Real Gross National Product	4.4	2.1	2.0
Inflation:			
GNP Deflator	7.3	8.9	7.7
Import Deflator	5.4	14.3	7.9
Farm Prices	21.6	15.6	6.6
Crude Materials Prices	12.9	23.0	12.2
Productivity, Private Nonfarm Sector	0.3	-1.0	1.3
Change in Unemployment Rate (percent)	-1.0	-0.15	0.6

[a]Source for first three quarters of 1979 and calendar 1978, *Survey of Current Business*, October 1979. Date for the fourth quarter of 1979 represent the current MQEM forecast.

[b]Projected as of November 1978.

The Current State of the Economy and Input Assumptions

The basic framework within which our forecast of 1980 is generated is set by the following three broad factors:

- *The specification and parameter estimates embodied in the Michigan Quarterly Econometric Model (MQEM).* It is these factors which both summarize relevant previous history and process current information and projections of economic policy to determine the short term economic outlook.
- *The current state of the economy.* Our initial or starting position clearly impacts directly on the likelihood of alternative paths of development of economic activity in the next year.
- *Projections regarding the stance of government economic policy and other key variables not explained by our model.* In addition to projecting the status of key monetary and fiscal policy variables we must also "inform" our model concerning expected developments in world trade, farm and crude materials prices, and other factors.

The structure of MQEM is continually being evaluated and modified as part of our ongoing research and forecasting program. This review and modification of our model is guided by an assessment both of the model's forecasting performance and the needs of forecast users. In the past year and a half, the results of two important pieces of research have been incorporated into the model's structure. About a year ago we introduced a substantially enlarged monetary sector designed not only to better articulate the economic mechanisms determining interest rates and monetary aggregates, but also to introduce into the model the important relationship between the Federal deficit and the bond market.These changes were incorporated into the model used for last year's forecast. More recently we have developed a more detailed determination of business investment expenditures in producers' durable equipment. Our model now contains a three-sector disaggregation of this component of aggregate demand (agricultural equipment, production equipment, and all "other" producers' durable equipment) rather than the single aggregate relationship used in recent years. These new relationships are in use at the present time, and the additional sectoral detail is contained in the forecast for 1980.

We turn now to an assessment of the current state of the economy and our input assumptions for 1980 and beyond. After rising at a rate of 4.6 percent during the last half of 1978, real GNP grew little at all in the first quarter of 1979 and then declined sharply in the second quarter of this year. Although the slowdown was certainly "led" by durable goods and construction expenditures, it was broadly based among almost all components of aggregate demand. In the second quarter, only inventory investment showed substantial growth in real terms. Perhaps surprisingly, real GNP turned up in the third quarter, wiping out the entire decline of the previous quarter. Although the third quarter experienced a sharp drop in the rate of inventory accumulation, net exports and consumer expenditures expanded briskly with the latter reducing the saving rate to 4.1 percent. A year ago we had forecast that the middle two quarters of 1979 would be characterized by virtually no growth in real GNP. Current estimates for this period confirm the net result of that forecast although the actual quarter-to-quarter movements in GNP growth rates were considerably more volatile, registering -2.3 percent and +2.4 percent percent for the second and third quarters, respectively. This unanticipated volatility can be explained in large part by the direct and indirect effects of the sharp changes in price and availability of gasoline in the Spring and Summer quarters of the year. Despite this rather weak overall performance of the economy from 1978:4 through 1979:3, the unemployment rate remained almost unchanged as output per hour in the private non-farm sector declined by 1.5 percent in the year ending in 1979:3.

We are now forecasting that the fourth quarter of 1979 will be characterized by virtually no growth in real GNP. Specifically, we now expect the fourth quarter to register an annual rate of growth in real GNP of only about 2/10 of one percent, with relatively sharp declines forecast in consumer expenditures on durables (especially cars) and residential construction. Further, we expect the personal saving rate to remain very low at close to 4 percent. Interest rates, which have already registered historic highs, are expected to be little changed during the closing months of the year. Inflation rates, partly under the influence of rapidly rising energy prices, will remain at the double-digit level in the fourth quarter. We forecast that the GNP deflator and the consumer price index (CPI) will register annual growth rates of 10.1 percent and 11.4 percent, respectively. Thus the final quarter of the year is characterized by virtually no growth in the output of goods and services, continuing high inflation rates, and interest rates at historically high levels.

The economic outlook for 1980 will be shaped in important ways by the economic policies of the Federal Government. This is so despite the fact that the full economic effects of policy actions occur with some lag. While the current period may be thought of as one of considerable uncertainty regarding the future course of national economic policy, we must face the task of articulating as best we can the set of policies that seem most likely to be put in place over our forecast horizon. Such a choice obviously requires a judgment on our part not only regarding the general nature of the short-term economic outlook, but also regarding the national government's attitude towards certain tradeoffs between alternative objectives that might be available. Our Control Forecast contains the following assumptions with respect to the future course of monetary and fiscal policy.

With respect to monetary policy:

- *The monetary base*—as measured by the Federal Reserve Bank of St. Louis—which followed a rather volatile path from very slow growth (4.6 percent annual rate) at the beginning of 1979 to very rapid growth (12.6 percent) in the third quarter of 1979, is projected to grow by 9 percent (annual rate) in the current quarter and by just under 8 percent from 1979:4 to 1980:4.
- *The discount rate* is assumed to remain at its current level of 12 percent through the middle of the second quarter of 1980 and then to decline by 50 basis points in each succeeding quarter to a level of 10 percent by mid-1981:1.

Regarding *fiscal policy*, our forecast is based on a number of assumptions with respect to both the expenditure and revenue (tax) sides of the Federal budget. We are projecting an increase in Federal expenditures (National Income and Product Accounts basis) of $53.0 and $50.9 billion in Fiscal 1980 and 1981, respectively. For fiscal 1980 the projected level of expenditures of $546.7 billion is virtually the same as that currently projected by the Office of Management and Budget (OMB). In detail, however, we are projecting a somewhat lower level of purchases and higher level of transfer payments than OMB. Our projected budget contains a 13 percent increase in defense purchases—adequate to achieve the targeted increase of 3 percent in real terms. A similar percentage increase in defense expenditures is incorporated into the 1981 budget in order, once again, to achieve a minimum 3 percent increase in real terms. Defense and transfer payments, the latter substantially indexed to inflation, remain the fastest growing elements in the budget.

With respect to revenue or tax policy we have incorporated the following policy actions into our forecast assumptions:

- An indefinite postponement of the currently scheduled increases in the Social Security tax rate (1981) and the wage ceiling for Social Security tax purposes (1980 and 1981). The estimated revenue impact of these scheduled tax increases would have been $5 billion in 1980 and $11 billion in 1981.

- Passage of a windfall profits tax yielding about $1.6 billion in revenues for calendar 1980 and $3.1 billion for calendar 1981. We further assume that most of these increased revenues ($1.6 billion in 1980 and $2.6 billion in 1981) will be returned to households to help offset the burden of higher utility and home heating oil bills.

In addition, our forecast also incorporates scheduled decreases in taxes established by the 1979 tax-cut bill. Taking account of these changes in tax policy, the anticipated levels of Federal revenues derived from our Control Forecast together with our projections of expenditure levels result in anticipated Federal deficits of $21.4 billion in Fiscal 1980 and $37.4 billion in Fiscal 1981. This compares to a deficit of $10.7 billion now estimated for Fiscal 1979 and is roughly consistent with the deficit ceiling of $29.8 billion on the Unified Budget for 1980 which was recently adopted by the Congress.

With respect to *state and local government purchases*, we are projecting an increase of $34.5 billion (11.2 percent) for calendar 1980. This exceeds the increase of $26.3 billion, or 9.3 percent, now estimated for 1979, but is below the increase of nearly 12½ percent experienced in 1978.

A number of important assumptions have been made regarding the *foreign sector*:

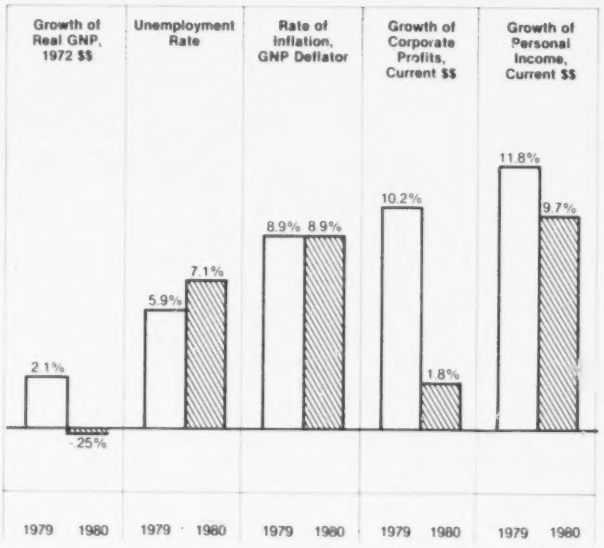
- The price of imported oil is expected to rise rapidly in the final quarter of 1979 to an average level of $26.00 per barrel. We expect the price of imported oil to continue rising relatively rapidly throughout our forecast horizon. In terms of dollars per barrel we are projecting an increase to $28.60 by the second quarter of 1980 and just over $32.00 by mid-1981. Domestic crude oil prices are projected to rise even faster as a result of the process of gradual decontrol. From a level which we estimate at $15.50 per barrel in the third quarter of 1979, domestic prices are projected to rise to $22.00 by mid-1980 and to be very close to the projected world level of $32.00 per barrel by mid-1981.
- Net of the effects of rising oil prices, the price of imports—as measured by the import deflator—is projected to rise at an 8 percent annual rate throughout our forecast horizon. Including the impact of oil prices, import prices are expected to rise at an annual rate of 13.8 percent in the final quarter of 1979 and by 9.5 percent from 1979:4 to 1980:4.
- The volume of U.S. exports is expected to increase at an annual rate of 4 percent through the third quarter of 1980 and then rise further to a growth rate of 5½ percent (annual rate) by mid-1981. The chief strength of U.S. exports over this period is in the agricultural sector, but the rising growth rates projected after mid-1980 relate to stronger anticipated growth in the economies of our trading partners. Export prices—as measured by the export deflator—are projected to rise at a 9 percent annual rate through the first quarter of 1980, and at an 8 percent rate thereafter.

Finally, we must introduce a set of assumptions regarding farm prices, crude materials prices, and retail gasoline prices over our forecast horizon. Our forecast of 1979 seriously underestimated the rate of inflation in all these areas (see Table 1). With respect to *farm prices*, we are now projecting modest increases (7 percent annual rate) through the first quarter of 1980, with much sharper increases in subsequent quarters. Between the fourth quarters of 1979 and 1980 we are projecting an increase of 12 percent in farm prices. These relatively rapid increases are driven both by government support programs (sugar and dairy products) and our expectation that domestically available grain and meat supplies will lag somewhat behind the growth of domestic demand. *Crude materials prices*, heavily influenced by domestic oil prices, are projected to rise by 17.6 percent from 1979:3 to 1980:3 and 13.4 percent in the following year. For calendar 1980 this represents an increase of 18.5 percent compared to the 23.0 percent increase now estimated for 1979. *Retail gas prices* are projected to increase at an annual rate of almost 20 percent during the current quarter and by a further 23 percent between the fourth quarter of 1979 and the fourth quarter of 1980. For 1980 as a whole these projections imply a 32 percent increase over gas prices in 1979—a very similar increase to that experienced in the current year. In summary, substantial increases in the prices of farm products (after next spring) and of both domestic and imported oil are projected to make significant contributions to the rate of inflation.

An Overview of the Forecast for 1980

An overview of our Control Forecast for 1980 is presented in Charts 1 and 2. Compared to the 2.1 percent increase in real GNP now expected to characterize 1979, we are forecasting a decline in the real output of goods and services of -0.25 percent for the year 1980 as a whole. Corresponding to this forecast of a virtually stagnant level of aggregate production, we anticipate a rise in the unemployment rate to a level of just over 7 percent for the year as a whole, and to a level above 7.5 percent by the end of 1980. The rate of price inflation—as measured by the GNP deflator—is forecast to remain at the 1979 level of 8.9 percent for calendar 1980 as a whole. By year-end, however,

Chart 1. MQEM CONTROL FORECAST FOR 1980: OVERVIEW OF SELECTED INDICATORS



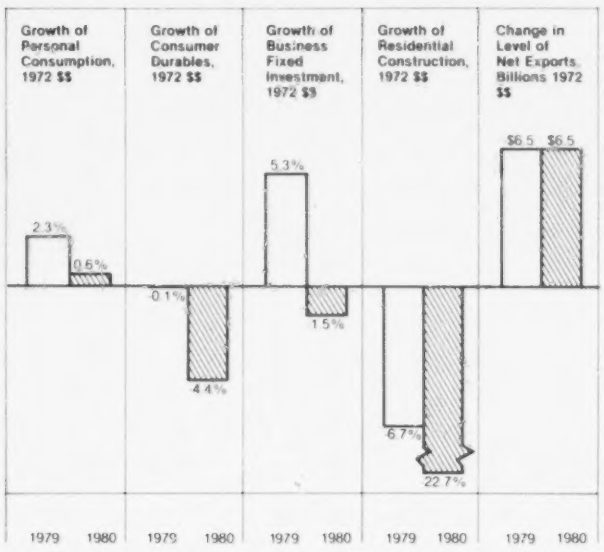
Sources: Actual data, U.S. Department of Commerce; projected data, MQEM

we expect that inflation rates will have declined by about 1½ percentage points from their late 1979 and early 1980 levels. The combination of a real growth rate of -0.25 percent and an aggregate inflation rate of 8.9 percent produces a forecast increase in current dollar GNP of 8.6 percent to a level of $2,571 billion. This compares to the $2,366 billion now estimated for 1979. Personal income is forecast to grow by 9.7 percent in 1980, compared to the 11.8 percent growth rate now estimated for the current year. A similar movement is forecast for disposable income. Real disposable income, however, is forecast to remain virtually unchanged for calendar 1980 as opposed to an increase of 2 percent now expected for 1979. We note also that the forecast contains a slight fall in farm income for 1980, and only modest growth in coroprate profits (up 1.8 percent for the year).

Chart 2 presents an overview of our Control Forecast for 1980 with specific reference to the composition of aggregate demand. As indicated in the chart, real expenditures on consumer durables and residential construction show the greatest weakness with declines of 4.4 percent and 22.7 percent, respectively. Developing weakness is also apparent, however, in aggregate consumption and business fixed investment. Among the major components of aggregate demand the only real source of strength for 1980 is in net exports, and this is primarily due to the relative strength of U.S. exports of agricultural goods. In the monetary sector a small increase is forecast in the level of both short-term and long-term interest rates, although by year-end short-term rates are considerably below their peak levels of late 1979.

Annual averages and year-to-year changes often fail to reveal important aspects of ongoing economic developments. It is important to supplement this overview, therefore, with an analysis of the quarter-by-quarter path of economic activity as projected in our Control Forecast.

Chart 2. MQEM CONTROL FORECAST FOR 1980: CHANGES IN COMPONENTS OF REAL GNP



Sources: Actual data, U.S. Department of Commerce, projected data, MQEM

The Quarterly Path in the Control Forecast

The quarterly path of output (real GNP) contained in the Control Forecast is shown in Chart 3. It is clearly a recession path, but the quantitative details are most important:

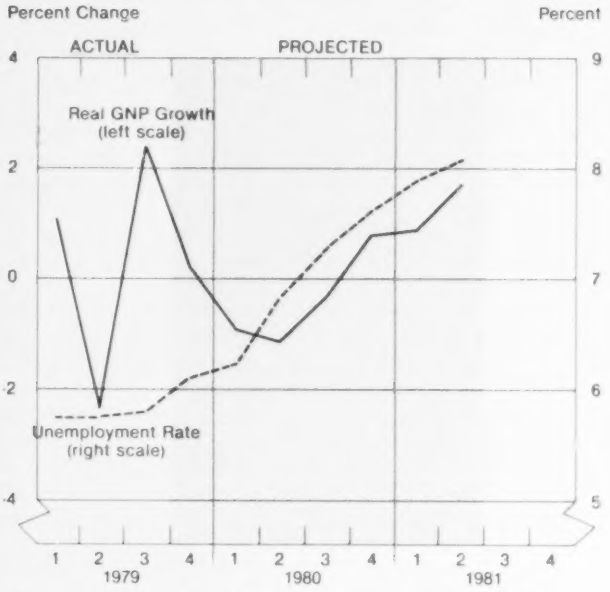
- Beginning with a rise of only 2/10 of one percent (annual rate) in 1979:4, the rate of growth of real GNP then turns negative for three successive quarters before positive growth is resumed in the closing quarter of 1980.
- The extent of the decline in real GNP – that is, the severity of the recession – is distinctly modest. In the 1980:3 trough quarter, real GNP is only about 6/10 of one percent ($8½ billion) below its preceding peak value in 1979:4. By comparison, the first three quarters of the 1975-76 recession produced a 2 percent decline in real GNP, and a further decline of 3.7 percent occurred in the next two quarters of that five-quarter-long recession.

The volatility of real GNP in the second and third quarters of 1979 effectively "masked" the basic underlying developments in the economy. In many ways a truer picture of economic developments is gained, in this instance, by considering semi-annual growth rates in GNP from mid-1978 through our forecast period. Beginning with the last half of 1978 these growth rates are as follows: 3.3 percent, 0.6 percent, zero, -0.2 percent, -0.7 percent and 0.8 percent. Thus the rather shallow "U-shaped" pattern is seen to have begun in late 1978 and to reach a trough in mid-1980.

The initial quarters of the recovery, however, are characterized by very slow growth rates. The growth in real GNP during the first half of 1981 is a very modest 1.3 percent at annual rate. This compares to an annual growth rate in real GNP of almost 8 percent in the half year immediately following the 1974-75 recession, and to a growth rate of just under 8 percent for the first year of the expansion. Thus in these terms the initial stage of recovery following the 1980 recession is very sluggish indeed. There are a number of factors at work here. One has to do with an atypical aspect of the 1980 recession. Historically, most recessions have been characterized by a progressive easing of credit conditions, which leaves the banking system in a position to accomodate the early stages of the subsequent expansion with little difficulty. In addition, the Fed has often acted to reinforce the easing of credit conditions during recessions and early expansion periods. The 1980 recession – as we forecast it – will not be characterized by such an easing of credit conditions, in part because the recession itself is so mild and, in addition, because we have assumed that the Fed will continue to pursue a policy of slow growth of the monetary base. Another special circumstance relates to energy prices, including both world prices and the rapid growth of domestic oil prices under the decontrol program. In our model, the continued rapid increase in the price of gasoline keeps the auto market from recovering as rapidly as would be the case if the same expansionary factors were at work without such increases.

Corresponding to this forecast path for real GNP, our Control Forecast implies a continuous rise in the aggregate unemployment rate throughout our forecast period (see Chart 3). Increases in the unemployment rate, however, do moderate somewhat after positive real growth rates resume in the final quarter of 1980. By year-end, however, we are predicting an unemployment rate of 7.6 percent, 1.5

Chart 3. ANNUAL RATE OF GROWTH OF REAL GNP; UNEMPLOYMENT RATE



Sources: Actual data, U.S. Department of Commerce; Projected data, MQEM

percentage points higher than in the closing quarters of this year. By mid-1981, we expect a further rise to a level just over 8 percent. During the first half of 1981, the resumption of positive growth rates in productivity "prevents" any rapid arrest of the rising unemployment rates despite improving real growth rates.

The sectors forecast to exhibit the greatest weakness in the 1979-80 recession are residential construction, responding to interest rates at historically high levels during this period, and the automotive sector. During our forecast period homebuilding activity reaches its trough in the final quarter of 1980, almost 36 percent below its peak activity level reached some two years earlier. A similar pattern is forecast for the automotive sector, which reaches its trough in the third quarter of 1980 about 23 percent below its peak activity level of mid-1978. Thus, in these two sectors the recession is both long and fairly deep. The forecast pattern of activity is quite different in the area of business expenditures on new plant and equipment. Here, peak levels of activity are achieved in the third quarter of 1979 followed by a continuous series of modest declines throughout the forecast horizon. From mid-1980 to mid-1981 the level of real expenditures in this sector falls by about 6½ percent, and in the second quarter of 1981 real expenditures are some 7 percent below the peak levels achieved in 1979:3. These durable goods sectors were also the weak spots in the 1974-75 recession, although the percentage declines from peak to trough during that recession were 16 percent for business fixed investment (as opposed to the 7 percent decline forecast in 1980-81), 42 percent in residential construction activity (versus 36 percent in 1980-81), and 34 percent in the automotive sector (versus 23 percent in 1980-81).

Personal income is forecast to rise 9.7 percent for the year 1980, but corporate profits (including IVA and capital consumption allowances) rise by only 1.3 percent. Corporate profits respond quickly to the negative real growth rates, and after reaching a peak of $195.3 billion in the first quarter of 1980 decline during the remainder of calendar 1980 before beginning a partial recovery through mid-1981. By the end of our forecast period, 1981:2, corporate profits rebound to about the level achieved in the third quarter of this year. Disposable income, corrected for inflation, shows virtually zero growth for calendar 1980. On a quarterly basis, real disposable income drops modestly through mid-1981 and then recovers slowly. Personal saving rates are forecast to remain close to 4 percent throughout the forecast period. By historical standards this is very low indeed.

In the presence of the continued rapid increases forecast for energy prices, the overall rate of inflation, whether measured by the GNP deflator or the Consumer Price Index, is forecast to moderate steadily, but only slowly. By mid-1981 we are forecasting a rate of inflation—as measured by the GNP deflator—of close to 8 percent. The corresponding forecast for the Consumer Price Index is 9.3 percent. Thus, while some moderation in the rate of inflation is expected, no dramatic "break" in inflation rates is anticipated through mid-1980.

Finally, short-term interest rates are expected to reach peak values in the final quarter of 1979 and to decline thereafter throughout the forecast period. We are now expecting a 12.3 percent rate for 3 month Treasury Bills in the current quarter. Thereafter we forecast a steady fall in this rate to a level of 9.8 percent in the fourth quarter of 1980, and to 8.2 percent by mid-1981. Long-term rates (the Aaa Corporate Bond Rate) are forecast to rise somewhat through mid-1980, from the 10.25 percent level now expected for the current quarter, but then to return to this level by the second quarter of 1981.

Table 2 displays additional quarterly detail from the Control Forecast.

The Impact of Additional Tax Cuts

There has been considerable discussion in the press and in Congress concerning the advisability of various tax cut packages. In our Control Forecast we assumed the passage of legislation that would postpone the scheduled increases in Social Security taxes and establish a windfall profits tax in the oil industry along with a mechanism to return the bulk of these new revenues to households. In order to evaluate the impact of additional tax-cut stimuli on the economy we assumed the following additional tax program initiated in the third quarter of 1980:

- a cut in personal income taxes of $10 billion dollars,
- an increase in the Investment Tax Credit from 10 percent to 15 percent, and
- adoption of new accelerated depreciation schedules for both structures and equipment. In both cases we assume that the effective annual depreciation rate—for tax purposes—in increased by approximately 5 percentage points.

This additional program implies a reduction of Federal revenues of approximately $8.4 billion in calendar 1980 and $19 billion in calendar 1981. No change in Federal government expenditures or monetary policy is assumed in conjunction with this tax-cut package. The impact of this program over our forecast period (through 1981:2) can be briefly summarized as follows:

- A modest increase in the real growth rate from mid-1980 through mid-1981. With the additional

Table 2. SELECTED ECONOMIC INDICATORS AS FORECAST BY MQEM

seasonally adjusted

ECONOMIC INDICATOR	Quarterly Data										Annual Data			
	ACTUAL			PROJECTED							Act.	Proj.	Act.	Proj.
	79:1	79:2	79:3	79:4	80:1	80:2	80:3	80:4	81:1	81:2	1979	1980	% Changes 78-79	79-80
GROSS NATIONAL PRODUCT	2292	2330	2192	2451	2500	2543	2590	2649	2707	2771	2366	2571	11.2	8.6
PERSONAL CONSUMPTION EXPENDITURES	1454	1476	1529	1565	1602	1636	1672	1712	1750	1790	1506	1656	11.5	9.9
DURABLE GOODS	213.8	208.7	213.6	212.7	214.0	214.3	215.6	221.1	225.4	230.4	212.2	216.3	6.0	1.9
AUTOMOBILES and PARTS	97.7	89.1	89.8	87.2	86.2	84.9	85.0	89.6	92.9	97.0	91.0	86.4	-0.2	-5.0
FURN. and H.H. EQUIPMENT	82.1	84.2	88.2	89.3	91.0	91.9	92.5	92.8	93.0	93.2	85.9	92.1	10.7	7.1
OTHER DURABLES	34.0	35.4	35.6	36.2	36.8	37.4	38.1	38.8	39.5	40.2	35.3	37.8	12.1	7.0
NONDURABLE GOODS	571.1	581.2	602.4	617.7	633.4	648.4	665.0	680.7	696.3	712.0	593.1	656.9	11.8	10.8
SERVICES	669.3	686.0	712.3	734.2	754.6	773.3	791.4	810.3	828.7	847.4	700.4	782.4	13.0	11.7
GROSS PRIVATE DOMESTIC INVESTMENT	373.8	395.4	392.0	396.6	397.1	391.9	386.6	385.6	389.9	399.8	389.4	390.3	10.8	0.2
NONRESIDENTIAL	243.4	249.1	257.1	263.8	271.0	275.2	277.2	278.0	278.8	280.7	253.3	275.4	14.5	8.7
RESIDENTIAL STRUCTURES	111.2	112.9	114.9	114.1	106.9	96.8	90.0	88.7	92.3	100.1	113.3	95.6	4.9	-15.6
CHANGE in BUS. INVENTORIES	19.1	33.4	20.0	18.7	19.2	19.9	19.3	18.9	18.8	19.0	116.9	120.3	--	--
NET EXPORTS	4.0	-8.1	-5.3	-6.3	-4.6	-2.7	0.7	4.4	5.8	7.3	-4.0	-0.6	--	--
EXPORTS	238.5	243.7	266.4	274.9	283.6	292.5	301.3	311.4	321.2	331.9	255.9	297.2	23.5	16.2
IMPORTS	234.4	251.9	271.7	281.2	288.2	295.2	300.6	307.0	315.4	324.6	259.8	297.8	19.5	14.6
GOVERNMENT PURCHASES	460.1	466.6	476.2	495.7	505.4	517.8	530.6	547.1	560.6	574.3	474.7	525.2	9.0	10.7
FEDERAL	163.6	161.7	162.5	173.7	174.9	178.6	182.4	189.7	193.7	197.7	165.4	181.4	8.4	9.7
NATIONAL DEFENSE	103.4	106.0	108.5	113.7	116.9	120.1	123.4	129.2	132.6	136.0	107.9	122.4	9.0	13.4
OTHER	60.2	55.7	54.0	60.0	58.0	58.5	59.0	60.5	61.1	61.7	57.5	59.0	7.2	2.7
STATE and LOCAL	296.5	304.9	313.7	322.0	330.5	339.2	348.2	357.4	366.9	376.6	309.3	343.8	9.3	11.2
GROSS NATIONAL PRODUCT DEFLATOR, 1972 = 100	160.2	163.8	167.1	171.2	175.1	178.6	182.0	185.8	189.4	193.1	165.6	180.4	8.9	8.9
REAL GROSS NATIONAL PRODUCT (billions of 1972 dollars)	1431	1422	1431	1431	1428	1424	1423	1426	1429	1435	1429	1425	2.1	-0.3
AGGREGATE UNEMPLOYMENT RATE (percent)	5.7	5.7	5.8	6.1	6.4	6.9	7.3	7.6	7.9	8.1	5.9	7.1	--	--
CORPORATE PROFITS plus IVA and CCA	178.9	176.6	189.4	193.8	195.3	189.7	183.9	183.4	184.6	188.7	184.7	188.1	10.2	1.8
PERSONAL DISPOSABLE INCOME	1572	1602	1637	1675	1714	1750	1796	1837	1876	1915	1621	1774	11.2	9.4
REAL DISPOSABLE INCOME (billions of 1972 dollars)	996.6	993.0	990.3	990.1	989.9	989.6	995.6	998.9	999.7	1000	992.5	993.5	2.0	0.1
PERSONAL SAVING RATE (percent of disposable income)	5.0	5.4	4.1	4.0	3.9	3.9	4.3	4.2	4.1	3.9	4.6	4.1	--	--

Note: All data are in billions of current dollars unless otherwise indicated.

Sources: Projections by Research Seminar in Quantitative Economics, University of Michigan; actual data from Departments of Commerce and Labor, Board of Governors of the Federal Reserve System.

stimulus, a growth rate of 1.2 percent is achieved as compared to the 0.75 percent of the Control Forecast.

- A very modest strengthening of real business fixed investment expenditures by mid-1981.

Because of the lags involved, however, the full impact of this program is not measured during our forecast horizon. A more meaningful exercise is to assess the effects of such a tax stimulus program 8 quarters after the program has been initiated. By this time the effects of the program have been more fully worked out. The impact of this program over an 8 quarter period is illustrated in Charts 4 and 5. At the end of the two year period, real GNP has risen by an additional $15½ billion, allowing a reduction of 0.4 percentage points in the aggregate unemployment rate (see Chart 4). Further, there is little, if any, inflationary impact of the program as the improved productivity thereby generated permits a greater level of output without added inflation. At first the source of this improved productivity performance is largely cyclical, but as time passes some impact is felt from the installation of new capital as well. Also interesting are the data presented in Chart 5, which sets out the gains in investment and consumption from this stimulus policy. As one might expect, the consumption effects occur relatively quickly while the impact on investment expenditures lags somewhat. By six quarters out, the two effects are approximately equivalent; subsequently the investment effects dominate. By eight quarters out, we have an additional $6.4 billion in real consumption and $10.0 billion in new investment (1972 dollars). As noted above, the total impact on real GNP is approximately $15.5 billion—just over one percent of its level.

Concluding Comments

Our Control Forecast reflects our expectation that the U.S. economy will pass through a recession in the coming year, although the expected loss in output is relatively modest by historical standards. In such an environment it might be reasonable to expect some additional monetary and fiscal stimulus, especially since the first three quarters of the year, just prior to a national election, are forecast to be characterized by declining real GNP and rising unemployment rates. However, because inflation is expected to remain close to the two-digit level and so much uncertainty exists regarding energy supplies—both domestic and foreign—we believe that the most likely tax stimulus package will be limited to the payroll tax item incorporated into our Control Forecast. In fact, the Control Forecast already includes a turn to somewhat greater monetary ease by mid-1980, and the impact of this policy change is of some importance in turning around the declines in GNP that are forecast for the first three quarters of 1980. Our best judgment, therefore, is that the Control Forecast contains the most likely configuration of economic policy over the forecast horizon.

We have made no special allowance for the existence of wage/price guidelines. But our Control Forecast contains increases in wages and prices of approximately 9 percent, and we believe this to be the outcome most likely to accompany the constraints suggested by the Administration.

Finally, one cannot overlook the possibility that short-run "bottle-necks" induced by the disruption of energy supplies (either crude oil from abroad or domestic distribution difficulties) could have a sharp effect on the economic outlook, very much as we experienced in the second quarter of 1979. We have made no specific provision for such an event.

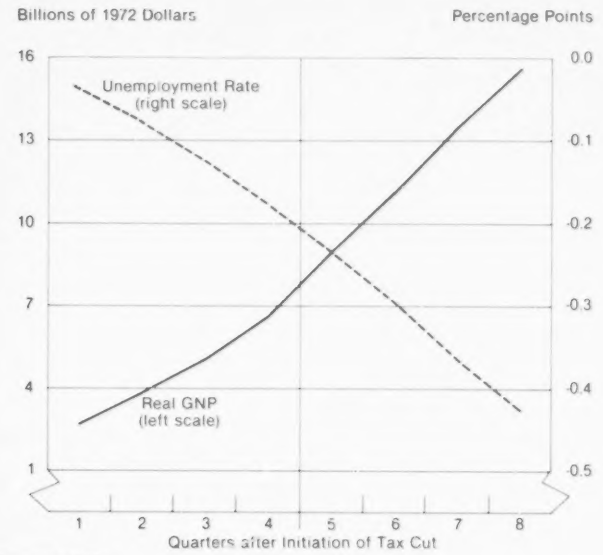
In summary, we view the economic outlook over the next year and a half as having very sluggish real growth accompanied by slightly lower inflation rates. In this context unemployment rates can be expected to rise steadily. The recovery forecast from the recession which we expect to characterize the first half of 1980, however, is critically dependent not only on our assumption of a modest easing of monetary policy after mid-year, but also on the postponement of scheduled Social Security tax increases. Indeed, it seems appropriate to us to give careful consideration to additional tax stimulus programs in mid-1980.

November 1979

Addendum: The preceding analysis was completed early in November for presentation at the University of Michigan's Economic Outlook Conference in mid-November. The availability of new information led us to update the Control Forecast for internal purposes in late December. In particular, the estimate of the growth rate of real GNP for 1979:3, as reported by the Department of Commerce, was revised from a preliminary figure of 2.4 percent to 3.1 percent at annual rate. In addition, the scheduled meeting of the OPEC oil ministers resulted in substantially higher oil prices including a 33 percent increase in the price of Saudi Arabia's marker crude. Further, in the area of fiscal policy, the rollback of the Social Security tax increase for 1980 no longer appears probable.

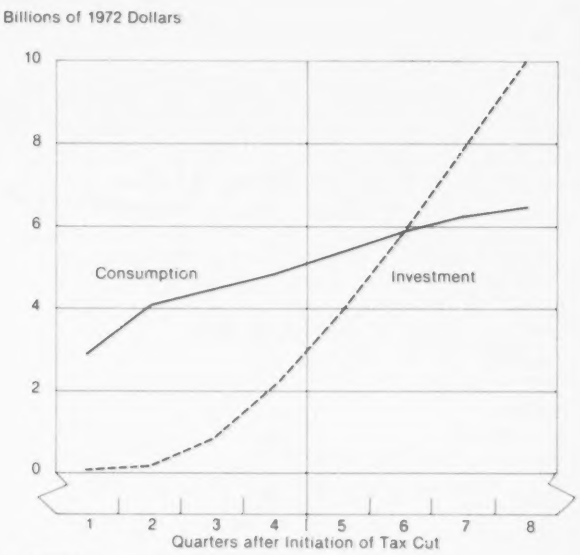
The general pattern of our forecast for 1980 remains unchanged—including the relative movements of the components of real output as well as the paths of the broader aggregates. The growth rate of real GNP in the updated version of the forecast remains positive for the final quarter of 1979 at a 1 percent annual rate. A three quarter recession follows with the sharpest drop in real growth (-2.7 percent) occurring in the first quarter of 1980. In the final quarter of 1980 the economy returns to slow positive growth—again about 1 percent. Our projection of the rate of inflation for calendar 1980, as measured by the GNP deflator, remains unchanged from our November forecast at 8.9 percent while we anticipate an unemployment rate of about 7 percent for the same period.

Chart 4. INCREASE IN REAL GNP AND DECREASE IN UNEMPLOYMENT RATE DUE TO TAX CUT POLICY



Source: MQEM

Chart 5. INCREASE IN REAL CONSUMPTION AND BUSINESS FIXED INVESTMENT DUE TO TAX CUT



Source: MQEM

The Uncertain 1980s

Paul W. McCracken
Edmund Ezra Day University Professor of Business Administration
The University of Michigan

The American economy and decennial years have not had a notably harmonious relationship during the last century. For those with numerological inclinations, this may be another reason for worry as 1980 and the new decade come on stage. Of the ten decennial years during the last century, including 1980, two (1940 and 1950) escaped being associated with bad news for the direction of the general economy, and they had the stimulus of a rapid expansion in outlays for national security to push things along.

If 1980 breaks this century-old pattern and moves upward throughout, the few hardy souls in the profession still practicing macro-economics will be sitting before their drafting boards with brows really furrowed deeply. In the December monthly round-up of 42 economists' forecasts by Eggert Enterprises, only six did not predict a lower level of economic activity in real terms for 1980 than for 1979, the average projected decline for the 42 being 1.1 percent. And one of the six was Mr. Eggert himself who chose not to take sides and projected no change year-to-year. This expectation of a recession seems to be shared by the econometric services, most of whose models, after exercising their numerous equations, produce projections pointing to about the same slippage in the economy.

The Effects of Government Economic Policy

There are these points to make about this outlook. While predictions about a recession earlier in 1979 were, like the report of Mark Twain's death, exaggerated, they were (as also with the Twain report) in the final analysis simply premature—attaching too much significance to the sharp second-quarter drop in auto sales that reflected our gauche handling of gasoline problems rather than any general recession. Evidence about the state of the economy as we move into 1980 is more insistently pointing to a recedence in business activity this year. Basic fiscal and monetary policies themselves point in that direction. Actually budget policy has remained on a reasonably restrained and steady course. The rise in Federal outlays, probably the best crude measure of the thrust or push of the budget on the economy, was at a 10 percent rate in 1979—about the rate at which the economy itself was rising. And a slightly larger rise is projected for the current fiscal year (1980). Since something like this pace seems destined to continue, fiscal policy is not apt to deflect the economy from its path. That means it will not have caused a recession. It also means, however, that fiscal policy has done little to counter the economic pressures giving us double-digit inflation.

INCREASE IN FEDERAL OUTLAYS OVER PREVIOUS FISCAL YEAR

Fiscal Year	Total	Nondefense
1978	11.9%	13.2%
1979	9.5	9.1
1980	10.8	11.5

Source of basic data: Office of Management & Budget

Monetary policy has, therefore, had to carry the load. The sharp shift last October to a less expansive monetary policy was urgent and tardy. Indeed, the Federal Reserve would have to be assigned and academic grade of "F" for its performance during 1978 and 1979 up to the change in policy last October. The basic rate of expansion being established for the economy is about one percentage point higher than the rate of expansion of the broadly defined money stock (M_2). The Federal Reserve's policies in 1978 first allowed rates of expansion for M_2 in the 11-12 percent zone, and after a spasm of courage toward the end of that year allowed the rate of expansion to move into the 12-13 percent range in 1979—this in an economy whose capacity to increase real output had been reduced, as a result of government policies, to not over 3 percent per year.

INCREASE IN THE MONEY STOCK, 1979*

Quarter	M_2
First	1.7%
Second	11.9
Third	12.8
Fourth (est.)	7.0

*Seasonally adjusted at annual rate
Source of basic data: Federal Reserve System

Double-digit inflation was the inevitable result of these policies, they had to be changed, last October they were, and the results were already showing up in monetary data during the final quarter of 1979. This sharp change of direction was made necessary by the earlier failures of policy, but only in an economy enjoying an exceptional degree of internal balance would it be reasonable to expect no recedence in the economy from such actions. The economic scene as 1980 opens is not that serene.

Problem Areas

These actions are having the expected adverse effect on housing construction, and "starts" in 1980 will amost certainly be down 15-20 percent or so from 1979 levels. The only consolation to be found in this picture is that the decline would have been worse except for measures to keep funds more available for mortgage lending.

Inventories as the economy moved along through 1979 were becoming a bit heavy relative to the volume of sales. The excess was not large, far smaller than in 1974 before that downturn, but the sharply higher credit cost of carrying inventory will put pressures on businesses to pare down these stocks. That in turn means reduced production schedules, at each point in the chain, for suppliers.

The most serious imbalance in the economy is to be found in consumer buying. For one thing even the sluggish pace of retail trade during the closing months of 1979 was

INVENTORIES AS A PERCENT OF FINAL SALES*

Year:Quarter	Percent
1969:2	24.1%
1974:2	25.7
1979:3	24.0
Average of reasonably balanced quarters, 1973-78	23.6

*Seasonally adjusted, 1972 dollars

Source: U.S. Department of Commerce

pushing consumers hard. They were, in fact, saving about 2 percentage points less of their incomes than during most of the 1970s. While lurid worries about a collapse from too much consumer debt are over-drawn, consumer spending cannot be expected to continue running as high relative to their incomes as during the latter part of 1979.

The most dreary part of the retail sales picture has, of course, been sales of new domestically produced cars as uncertainties about availability of gasoline emerged in 1979. While supplies world-wide were tight, it was our insistence on keeping U.S. prices below world levels, and on having Government rather than markets allocate, that forced the U.S. to absorb a disproportionate share of the gasoline shortage.

At chic cocktail parties it is fashionable, particularly on the part of intellectuals, to explain the problem away by accusing the U.S. automobile industry of not producing cars that the public wants. The fact is that the domestic industry was on an orderly down-sizing program. It was, in fact, moving a bit more rapidly in that direction than buyers preferred—as indicated by the fact that relative to supply it was the demand for small cars that was sluggish through 1978. In 1979 the ineptitude of our energy policies, creating unnecessary filling station lines, then caused new-car buyers in panic to run to the other side of the ship. The serious unemployment in the automobile industry today is more "Made in Washington" than created by OPEC or in Detroit.

Areas of Strength

Two major areas of the economy will sustain the economy through 1980. Compared to 1979, businesses continue to plan for larger outlays, in real terms, to expand and improve their production facilities. This reflects in part a pervasive conviction in the business community that sharp slashes in their capital budgets in the 1974-75 recession were not wise. These drastic cuts left many businesses short of capacity and forced to re-activate some of those cancelled projects at much higher costs. Unless the general business situation develops into a cumulative decline, capital budgets this time will be better sustained.

Our export market will also, in real terms, be stronger than 1979—itself a good year. During the year ending with the third quarter of 1979 our merchandise exports showed a gain of 30 percent, compared with a gain of 11 percent in GNP (or 2 percent in real terms). Moreover, the increase in these exports was equal to 19 percent of the increase in our GNP, and equal to 47 percent of the increase in our output of goods (tangible products). While our important export customers (Canada, Japan, Germany, the U.K.) are reining in their domestic economies, having their own problems with inflation, they will continue to show some gains. U.S. exports should, therefore, rise further in 1980—though not at the dramatic rate of last year.

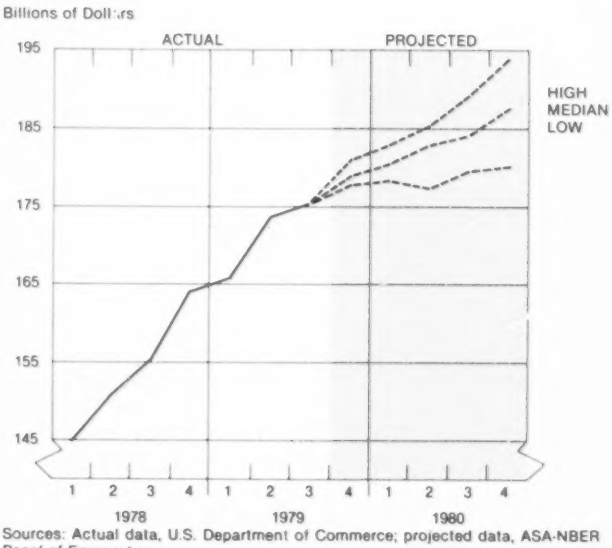
Summary Outlook

Mr. Eggert's economists are probably realistic. When all of the cross currents are taken into account, the volume of output in real terms this year will be down about 1 percent, the rate of inflation should be a point or so lower, and the unemployment rate will be up a point or two. If that will start us on the path to the lower rates of inflation and unemployment, and stronger sustained gains in real income, that have characterized the U.S. economy historically, 1980's trauma will have been a worthwhile investment.

As the year opens, we cannot ignore contingencies which, if they were to materialize, would have Gargantuan repercussions on the economy. If the Middle East were to erupt and its oil become unavailable to the rest of the world, the adverse impact would be of Stygian proportions. Wars historically have been fought over lesser threats than this to vital interests. Indeed, this era is starting to take on some of the personality of that which led up to World War II. Economists, however, have enough difficulty forming judgments about matters properly considered to be within their purview—without reaching for those beyond their horizon.

December 1979

BUSINESS CAPITAL OUTLAYS



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

Forecasts for 1979 and 1980: An Assessment and A Survey

Victor Zarnowitz
Professor of Economics and Finance
The University of Chicago

How well did economic forecasts fare in 1979? How is the economy doing now? What is being predicted for 1980 and why? Traditionally, this is the time of year to raise such questions, and we have done so in this space annually since 1975.

A Postmortem on the 1979 Predictions

The median forecasts from the November 1978 ASA-NBER survey over-estimated slightly the 1978-79 annual percentage change in real GNP and underestimated significantly the corresponding change in the implicit price deflator (column 5 in the table below). As a result, the rise in nominal GNP this year was predicted with a small error on the low side. The error in predicting too low a rise in current dollar outlays on plant and equipment also can be viewed as relatively small. The decline in housing starts was predicted very accurately. However, the forecasters were definitely too pessimistic on industrial production, the unemployment rate, corporate profits, and business inventory investment.

THE ECONOMY IN 1979:
PREDICTED VS. ACTUAL CHANGES

	Quarterly Changes				Annual Changes	
	1978:4-1979:1 (1)	1979:1-1979:2 (2)	1979:2-1979:3 (3)	1979:3-1979:4 (4)	1978-1979 (5)	1978:4-1979:4 (6)
GNP in current dollars[a]						
Predicted	2.4	1.9	2.3	1.7	10.2	8.6
Actual	2.6	1.6	2.8	1.8	11.0	8.9
GNP in constant dollars[a]						
Predicted	0.5	0.3	0.3	0.4	2.4	1.4
Actual	1.1	-2.3	3.5	-0.4	2.0	-0.1
Implicit price deflator[a]						
Predicted	1.8	1.8	1.6	1.6	7.4	7.0
Actual	2.2	2.2	2.0	2.3	8.8	9.1
Index of industrial production[a]						
Predicted	0.7	0.7	-1.3	0	2.8	0
Actual	1.0	-0.2	0.2	-1.1	4.5	3.3
Unemployment rate[b]						
Predicted	0.1	0.2	0.2	0.1	0.4	0.6
Actual	-0.1	0	0.1	0.4	-0.1	0.4
Corporate profits after taxes[a]						
Predicted	0.6	-1.4	-1.2	1.6	6.0	-0.4
Actual	7.3	-1.9	6.2	-5.4	17.0	5.8
Business expenditures on new plant and equipment[a]						
Predicted	3.0	2.1	1.4	1.7	10.8	8.4
Actual	1.2	4.5	1.0	2.1	12.7	9.2
New private housing units started[a]						
Predicted	-6.6	-7.0	-5.2	-1.8	-13.7	-19.2
Actual	-22.3	13.6	-0.2	-8.8	-13.9	-19.7
Change in business inventories[c]						
Predicted	-0.5	-3.5	-0.8	-2.7	-3.7	-7.5
Actual	-1.5	14.3	-18.1	-5.0	7.8	-5.6

[a]Percent changes.

[b]Differences, percent of labor force.

[c]Differences, billions of dollars.

Sources: *Predicted* changes are based on median forecasts from the November 1978 ASA-NBER survey. *Actual* changes are based on figures reported in the November 1979 issue of *Business Conditions Digest* for the four quarters 1978:4 - 1979:3 and on median forecasts from the November 1979 ASA-NBER survey for 1979:4 and 1979.

The comparisons between 1978:4 and 1979:4 (column 6) reflect the slowdown in economic activity that began a year ago much more strongly than do the 1978-79 (year-to-year) comparisons. The slowdown was reasonably well predicted by most forecasters, though its impact on real GNP was somewhat understated and its impact on industrial production and profits was overstated. The survey certainly deserves high scores for the 1978:4-1979:4 forecasts of business fixed and inventory investment and of housing starts. The underestimation of the inflation rate by about 2 percentage points is the most serious error here.

A year ago the prevailing view was that the economy would grow slowly in 1979, not that it would turn down, so that no quarterly declines in real GNP were specified in the median forecast (columns 1-4). Those who predicted an outright recession were still in a minority. During the first half of 1979 forecasters grew more and more pessimistic, and projections of declining activity both spread and deepened. But the events soon contradicted the predictions of a sustained contraction in total output beginning in the spring or summer. The pattern of movement that did materialize—down in the second and up in the third quarter—was generally unanticipated even six months after the forecasts reviewed here. For example, the median predictions from the May 1979 ASA-NBER survey had fractional declines of real GNP in 1979:2 and 1979:3 followed by a small rise in 1979:4.

The actual values for 1979:4 and the year as a whole are, of course, still unavailable at this time; those in the table are the average projections from the latest ASA-NBER survey, which reflect the prevailing expectations of a downturn. Should the economy perform better (worse) than these figures indicate, the year-ago forecasts in columns 4-6 will prove to be more (less) accurate than the table suggests.

The State of the Economy

Notwithstanding the sizable quarter-to-quarter variations in real GNP and the continued, though slowed, uptrend in employment, the basic fact remains that the U.S. economy has been hardly growing since the beginning of 1979. This is perhaps best shown by the flat course of the index of four roughly coincident indicators (nonfarm employment, personal income less transfer payments, industrial production, and real manufacturing and trade sales). This index has a good claim to serve as a monthly measure of overall economic activity, and its recent behavior is summarized in the tabulation that follows. The rise in employment was in recent months limited to the

cyclically rather insensitive service industries; in the goods-producing sector, employment seems to have peaked and real wages and salaries to have declined. Total employment has been increasingly lagging at peaks in the recent business cycles. The more sensitive coincident indicators are now all showing local trends that are either horizontal or mildly downward.

	1978:4	1979:1	1979:2	1979:3	10-11/1979
Leading index	143.1	142.8	140.1	140.0	137.5
Coincident index	144.3	145.4	144.9	145.0	144.8
Lagging index	152.0	158.2	162.8	167.6	179.2

At the same time, as is also shown in our summary, the index of twelve leading indictors, which tends to foreshadow the cyclical movement of the economy, has been drifting downward from a peak reached in October 1978. This is a slow but widely diffused drift, which extends to various series of marginal employment adjustments (hours of work, layoff rate, unemployment insurance claims), capital investment commitments (deflated new orders and contracts, housing starts and permits), real inventory investment, purchasing, delivery periods, profit margins, and certain comprehensive money and credit flow indicators.

In sharp contrast to the weakness of most leaders and coinciders, the series that tend to lag at business cycle turns have risen strongly this year. Those increases in interest rates and private debt aggregates, unit labor costs and inventories embody growing cost burdens to producers and thus have an adverse aspect when they accompany an economic slowdown. It is true that inflation mitigates these burdens by lowering the real costs of labor and finance to the firms that are able to raise their selling prices commensurately. But this ability is by no means equally distributed or unchanging, and the disparities are bound to increase both when inflation continues uncurbed and when it is curtailed by tightening of money and credit.

Developments such as those just described typify an economy in transition from an advanced expansion to a major slowdown. But a slowdown may end either in renewed expansion or in a generalized decline (recession), and the problem is that the signals do not differentiate well in advance between the two latter alternatives. A comparison of patterns of the current and past slowdowns presented in the previous issue of ECONOMIC OUTLOOK USA led to the suggestion that these measures, though permitting no firm conclusion, "lean toward the alternative of a recession." An updated comparison confirms this judgment, even though it includes some new information which shows the economy to be remarkably resilient (real GNP in 1979:3, unemployment in November). Both the leading and the coincident indexes, and most of their components, trace an intermediate course in their current patterns, below the average of the three previous slowdowns that did not become recessions but above the average of the six that did. With data covering the first ten months of the present retardation (tentatively dated as having begun in December 1978), the patterns suggest that this episode now resembles more a mild recession in its early stages than a passing interlude of shallow growth rates.

In contrast to the uncertainties about the elusive recession, there is no doubt at all about the fact that inflation rates have continued to soar. This is quite unlike the average cyclical patterns for the principal price indexes, all of which show inflation moderating during past slowdowns as well as recessions, but there is an obvious and important precedent in 1973-74. Actually, the lag in response of the inflation rates to onsets of sluggish business conditions has been increasing for many years now as people have learned to expect that inflationary policies will be pursued most of the time in peace or war, expansion or contraction.

The Fed's credit-tightening moves of early October were widely viewed as a major turn away from such policies toward a strategy of combating inflation by containing growth in the monetary aggregates. But the entrenched inflationary expectations will not be reduced permanently to much lower levels unless the policies of monetary and fiscal moderation are implemented consistently long enough to demonstrate that they can bring down and keep down the actual inflation rates. This will take considerable time. Meanwhile the short-run effect of curtailing the growth in bank reserves and letting interest rates move freely will be to make credit immediately more expensive and gradually less available. As a result, real economic activity will be lower than it would be otherwise.

Amidst much uncertainty about this novel course of action, the events begin to tell a story that is largely consistent with the above assessment. Since October 6 the growth of monetary aggregates has slowed and interest rates have risen substantially. Most recently, the demand for bank loans sagged, reflecting weaker business conditions, and market interest rates retreated a little from their peak levels. While remaining high by any reasonable measure, inflation was at least not accelerated still further. Contrary to a popular but faulty argument, the new rises in energy costs (like the old ones) do not compel a monetary accommodation and need not frustrate counter-inflationary action; however, it is surely true that they will hurt economic activity. The upward movement of the dollar was cut short, partly because the Fed's activities turned out to be less drastic than initially expected and partly because of foreign developments (new Mideast turmoil, higher European interest rates).

The Outlook for 1980

The prognosis grows out of the diagnosis, and after the preceding account it should not be surprising that economists expect the new decade to open on a rather cheerless note. (However, many look forward to favorable longer trends, particularly those who attach new hopes to anti-inflationary attitudes and policies.)

The median forecasts from the latest ASA-NBER survey show real GNP moving down in 1979:4 and the first half of 1980 at an average annual rate of about 2.9 percent. In the second half a sluggish initial recovery is to occur at a rate of 2.4 percent. The implied "shallow saucer" pattern resembles the movement observed in some mild recessions (1960-61, 1970) and contrasts with the "V-type" transitions at the end of steeper declines (1957-58, 1974-75). Industrial production movements will show the same timing but larger relative amplitudes: 4.7 percent down from a peak in 1979:1 to a trough in 1980:2, then up 3.2 percent in the second half of 1980. The time profiles of most individual forecasts are similar.

The unemployment rate will rise from 5.9 percent in 1979 to an average 7.3 percent in 1980. Early next year it is projected to reach 6.8 and in 1980:4 7.5 percent. Few of the surveyed predictions deviate from these averages by large margins.

Corporate profits after taxes are expected to decline from $148 billion in 1979:3 to $130 billion in 1980:2, then rise to $136 billion in 1980:4 (the figures are in current dollars at annual rates). This would be a relatively small and short movement compared with past cyclical declines in profits.

The forecasters are relatively pessimistic on the prospects for business fixed investment. They see the current-dollar expenditures on plant and equipment as rising about 4.8 percent between 1979:4 and 1980:4, which might mean a decline of 3 to 4 percent in real terms. The Commerce survey of business plans for capital spending released more recently (but conducted in late October and November) indicates a 5.9 percent increase between the second half of 1979 and the first half of 1980, which raises the possibility of some small real gain. For business inventory investment, on the other hand, the ASA-NBER survey foresees only a moderate downward adjustment, which does not turn negative.

Private housing starts, now estimated at 1.7 million units annual rate, are to fall to 1.4 million units in both 1980:2 and 1980:3, then to recover partially to 1.6 million units. The year-to-year comparisons yield declines of 13.9 percent for 1978-79 and 15.5 percent for 1979-80.

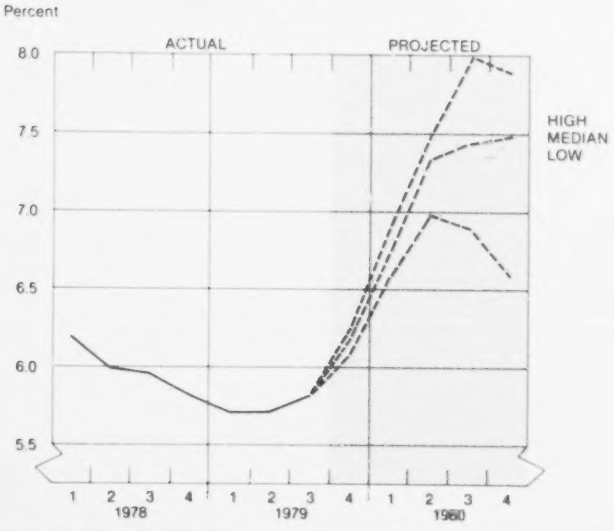
Consumer expenditures for durable goods, having already lost some 3.8 percent in real terms between 1978:4 and 1979:3, will continue to be a source of comparable weakness. In current dollars, their average level in 1980 is to be about the same as in 1979, but here too a weak recovery is expected to occur in the second half of next year.

The one positive element in the forecast is that the recession will be associated with a downturn in inflation. The annual rates of inflation, in terms of the implicit price deflator, are expected to hover between 8.2 percent and 8.5 percent in the first three quarters of 1980 (down from 9.7 percent in 1979:4), then to come down to 7.7 percent in 1980:4. Thus the survey suggests that inflation is at its peak right now and will drift down considerably next year. There is a high degree of consensus on that among the forecasters. Many report that they assumed an unchanged or tightened monetary policy, none that the policy will be eased; instead a tax cut between $15 billion and $25 billion is a frequent assumption.

Averages of other recently published forecasts by individual economists and teams operating econometric models resemble broadly the medians from the ASA-NBER survey. But this year the averages conceal come unusually large disparities among the forecasters. There are a few optimists who still foresee merely a slowdown or a *very* mild and short recession ending early next year and a few other who anticipate that the decline will extend into the second half of 1980 or begin only at mid-year. In short, the uncertainty about the prospects for the U.S. economy, heavily aggravated by international and domestic political factors, is as great as ever at the onset of this new decade.

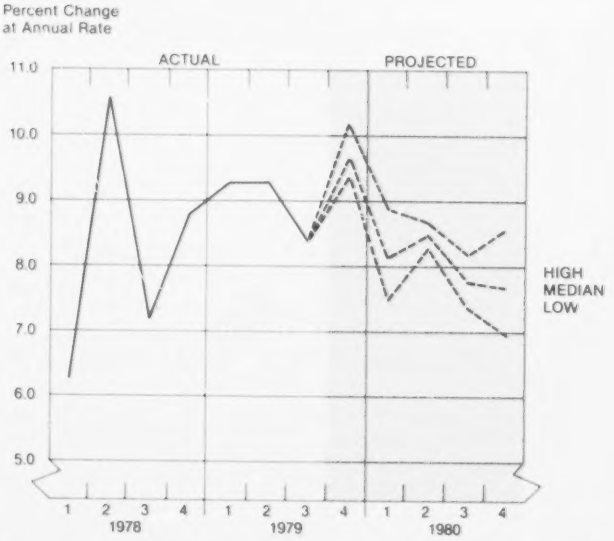
December 1979

UNEMPLOYMENT RATE



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

GNP IMPLICIT PRICE DEFLATOR



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

The Recession of 1980: Real or Imaginary?

F. Thomas Juster
Director, Institute for Social Research
Professor of Economics
The University of Michigan

As the decade of the 1980s dawns, economic forecasters are trying to resolve a number of questions concerning the near-term outlook and are puzzling equally hard over questions, perhaps more important ones, concerning economic prospects over the decade.

Short Term Uncertainties

For at least a year now, a significant majority of the forecasting fraternity has been expecting a recession to occur, including this writer. Most expected this recession to begin last year, while a few saw weakness emerging toward the middle or end of 1978. When data came in for the second quarter of 1979, a typical view was that the long-heralded recession had begun: automobile sales were weak, housing starts looked shaky, and nobody thought that consumers would continue pushing the saving rate down from its abnormally low level of roughly 5 percent in order to provide further sustenance for economic advance.

But the third quarter rebound surprised most everybody, the second quarter data didn't look quite as weak when revised as they did originally, and the economy entered the fourth quarter of 1979 with the year looking essentially flat rather than down. While the fourth quarter is not yet in, the preliminary guess is that it will show essentially no change in real activity, despite the pall cast on the economy by the rapid run up of interest rates during the last several months.

A typical view of 1980 prospects is that we will witness a recession of moderate severity, with year-to-year changes in real output showing 1980 about one percentage point lower than 1979, a peak-to-trough decline of perhaps 3 percent, and a slow recovery beginning late in 1980 and continuing through 1981.

Much of the puzzlement surrounding 1980 prospects rests in trying to figure out what consumers will do next. It is widely expected that the fourth quarter saving rate will be down to the unheard-of rate of 3 plus percent. A typical econometric model forecast has the saving rate wandering around between 3 and 4 percent during 1980 and, for that matter, 1981 as well. That seems hard to believe, given history, unless the world has really changed dramatically and consumer behavior has significantly altered in response to that change—which is possible. But the wary forecaster should keep in mind that it was not too many years ago—1975 to be exact—when saving rates were running around 8 percent, and the typical econometric model forecast had rates over 8 percent continuing during the next year. In short, conventional models almost inevitably make the future look much like the recent past, and if the recent past has been strange, the typical model will project that peculiarity into the future.

Why were saving rates down at the 3-4 percent level during the latter part of 1979, as apparently was the case? It's not too difficult to invent plausible reasons, although demonstrating that they account for the highly unusual saving behavior of American consumers is difficult, perhaps impossible, given our present statistical knowledge.

One obvious explanation is that the numbers are simply wrong: a statistical system that functions well when inflation rates are 2-6 percent does not necessarily function equally well when inflation rates are 10-13 percent. For example, certain types of income may tend to be badly reported more often when inflation rates are high, and estimated saving is after all the residual difference between estimates of income and estimates of consumer spending.

Many analysts point to the behavior of mortgage debt and the housing market as a major part of the explanation for low saving rates: in a market with rapidly rising housing prices and rapidly rising equity, anyone who sells a house realizes a substantial amount of cash, and not all that cash is necessarily put into purchasing another house. There is some evidence to support that line of thought, since housing mortgage debt has continued to be substantially larger than can be accounted for by mortgages incurred to buy newly built housing. Or possibly consumers are shifting money into goods by acquiring items like art objects, gold coins, jewelry, and what have you, all of which are really investment and saving but are measured as consumption the way we keep economic accounts in the U.S.

The data from the *Surveys of Consumer Attitudes*, reported elsewhere in this publication, are clearly consistent with the notion that consumers have been spending at a high rate during 1979 because of inflationary expectations; hence explanations that rest on people buying tangible assets of various sorts as the best way to hedge against inflation are behaviorally plausible. But toward the end of 1979, the survey data clearly show that speculative buying motivations were dropping sharply, in effect being overcome by concerns about high interest rates (affecting both housing and durables) and perceptions that prices were too high (affecting durables primarily.) Thus if speculative buying is the basic explanation for the low saving rates in 1979, a plausible guess from the survey data is that saving rates will rise appreciably in 1980.

Since the typical forecast finds a 1980 recession even with saving rates staying in the 3-4 percent zone, a presumption that saving is likely to increase in 1980 clearly implies an even sharper recession than generally forecast. But that scenario has some problems. If one looks at the rest of the economy, it is difficult to see much evidence of serious weakness:

- The present moderate level of auto sales, for example, may not decline much further since consumers are clearly interested in buying energy-efficient cars, although unenthusiastic about other models.
- While housing is universally expected to be extremely weak because of concerns relating to high mortgage rates, the basic structure of the housing market seems quite sound—vacancy rates are not excessive, a lot of

families are in the age and income categories where they are interested in home-buying, and people not thought to be home-buyers (singles) have turned out to be surprisingly strong buyers of single-family housing.

- Investment activity is certainly not weak generally, and major investments in structures have been sluggish for a long time and may provide a relatively buoyant investment sector.
- While government spending is not seen as moving ahead, current international uncertainties are inconsistent with a weak public sector spending performance.
- Finally, there seems to be almost no evidence of inventory inbalances of the sort that have typically generated severe recessions in the past.

While the speculative buying dimensions of consumer behavior seem to to receding in the data, the general cast of comsumer attitudes is not unfavorable. Consumer expectations both about their own and the economy's future reached a low point in the summer of 1979 and since then have recovered slightly. And that is in the face of consistently bad economic news, which no longer appears to have much effect in deepening consumer pessimism. While optimism is at a very low *level,* it was almost unaffected by the sharp monetary tightness in the fall and early winter of 1979, and has by and large been unaffected by the international uncertainties in Iran and Afghanistan. Thus although consumers are not particularly upbeat, the low level of their enthusiasm is not weakening further.

While the way these factors are usually added up produces a recession forecast, it seems plausible to this writer that they could add up to a flat, no-change scenario in terms of real output growth over the next several quarters. This is not to say that there will be no quarters of negative real growth, but a believable 1980 scenario consists of a replay of 1979—an erratic sideways movement, with some quarters of negative growth and some of positive growth, and not much going on generally because small pluses and minuses are cancelling each other out. If that is true for 1980, 1981 is more likely to see a modest rise than anything else, thus producing an extended growth recession but no real recession with its cumulative deterioration in real output, declining employment, rising unemployment, and sharp liquidation of excess inventories.

Either the recession scenario or the no-growth story has much the same implications for the behavior of prices during 1980. Partly for technical reasons, the consumer price index is likely to show a much better performance in 1980 than it did in 1979, while the more accurate Implicit Consumption Deflator is likely to show about the same or perhaps a slightly worse performance in 1980. The technical reasons have to do with the impact of rising mortgage rates on the CPI: if mortgage rates remain at their late 1979 level and do not move ahead further, the cessation of increases will have a perceptible effect in reducing the rate of growth in the CPI. And both the CPI and the Consumption Deflator may get some favorable 1980 news from food prices, which are generally expected to rise a lot less in 1980 than they did last year.

But the basic inflation rate in the economy is much better measured by looking at changes in wage costs than in looking at the behavior of particular prices like food or interest rates. There, neither a mild recession nor a no-growth period can be expected to have much impact. Thus, unless wages and prices behave much differently than anyone expects, we can anticipate entering the next period of economic expansion with a basic inflation rate that is far in excess of what most think tolerable.

Longer-Term Prospects

At the beginning of the decade of the 1970s, it was widely thought that the U.S. economy was in for a period of sustained growth and general economic prosperity. The 1970s proved to be far from that: the growth in real income was disappointing by recent historical standards, inflation rates showed probably the worst peace-time performance in U.S. history, and productivity growth, that mainspring of economic progress, continued to show noticeable deterioration.

Although the current problems of the U.S. economy may appear to be insoluble, a longer term perspective makes the decade of the 1980s look a little more promising. Many of our 1970s problems can reasonably be traced to economic changes that are likely to be temporary, or at least have a transitory character to them. For example, the dramatic shift in energy prices relative to all other prices, which fueled an appreciable part of the 1970s inflation rate in the U.S. and elsewhere, has had pervasive effects in shifting investments of all sorts from productivity-enhancing additions to the capital stock to energy-saving modifications of existing capital. That transition period, while not over, clearly represents a one-time adjustment to higher relative energy prices, and the adjustment process will not last forever.

Similarly, the rapid rise of labor force participation, especially among women, is unlikely to continue at the same rate, although it seems likely that participation rates will continue to grow for reasons relating to some clearly desirable characteristics of work as part of people's preferred mix of activities. But higher participation rates have limits, and the process of moving from moderate to high rates can only occur once. Although the evidence is by no means clear, it is entirely possible that part of the productivity slowdown of recent years is a consequence of the pressures on the economy to absorb very large numbers of new workers with relatively little training, or without recent training: that problem should ease as those workers gain experience.

Finally, the decade of the 1970s was characterized by a substantial diversion of investment into forms that enhance environmental quality, but have no direct impact on measured real output. In part, those environmental investments represent a makeup of investments that should have been made in the 1950s and 1960s, but were not. Again, there is a one-time transition in such investments, and while they can certainly be expected to continue, they may perhaps be anticipated to represent a smaller proportion of total investment resources in future years than they have been during the recent past.

While it is easy to identify problems that will face the American economy and society in the 1980s, one should not overdo the magnitude and duration of those problems. Some of them will doubtless continue unabated, and life will certainly be less smooth in the 1980s than it was during the 1950s and early 1960s. But some of our 1970s problems seem to this writer to represent the impact of transitory events, and coping with that transition has imposed costs which may be less onerous in the future than they have in the past.

January 1980

Buying Attitudes Decline

Richard T. Curtin
Director, Surveys of Consumer Attitudes
Survey Research Center
The University of Michigan

Pessimism Nears Record Levels

Representative sample surveys of American households conducted during 1979 have documented a sustained decline in consumer sentiment. By December 1979, the Index of Consumer Sentiment was 61.0, down 28 Index-points below the cyclical peak recorded two years earlier, and just 3 Index-points above the all-time record low recorded in early 1975 (see the chart, which displays the 1979:4 value of 63.3). The decline recorded in consumer confidence has been widespread among income and age subgroups as well as across geographic regions.

Future changes expected in economic conditions grew increasingly unfavorable throughout 1978 and into mid-1979; but since August 1979, evaluations of future business prospects have resisted further declines. During late 1979, however, favorable buying attitudes, which were maintained at an elevated level by buy-in-advance price rationales, were significantly weakened by high interest rates and limited credit availability. Consequently, by year end 1979, nearly all attitudinal and expectation measures were within the range of levels only recorded immediately prior to or during recession periods.

In comparison with prior periods, the current decline in consumer sentiment had become by the end of 1979 the longest recorded in the history of these surveys, although the extent of the decline remains less severe. Starting from February 1969, the Index of Consumer Sentiment declined by a total of 24 Index-points during 22 months of sustained decline—an average decline of 1.1 points per month. From August 1972 to February 1975, a decline of 36 Index-points was recorded in a 30 month period, for an average decline of 1.2 Index-points per month. The current decline following the May 1977 cyclical peak reading has amounted to a total of 28 Index-points, over a period of 31 months, for an average decline of 0.9 points per month.

Personal Finances Strained

By the end of 1979, evaluations of personal financial progress were less favorable than at any time except the 1974-75 record lowpoint. In the December 1979 survey, 27 percent said they were better off financially and 46 percent reported being worse off financially than a year ago. During the past two years, there has been a substantial increase in the proportion of respondents who report being worse off financially, rising from 29 percent in late 1977, to 38 percent in December 1978, and 46 percent in December 1979. When asked to explain why their financial situation had changed, 46 percent of all respondents mentioned that higher prices were making them worse off financially, up from 31 percent in December 1978, and 27 percent in late 1977.

In each of the 12 surveys conducted during 1979, proportionately more families expected to be worse rather than better off financially in the year ahead. Such a plurality of unfavorable personal financial expectations was recorded in only one survey prior to 1979—that conducted in late 1974. By year-end 1979, 26 percent expected to be worse off financially compared with 25 percent who expected improvement in the year ahead (the remaining near-majority expected no change in their financial situation).

INDEX OF CONSUMER SENTIMENT

Note: Shaded areas indicate recession periods as designated by the National Bureau of Economic Research, Inc.

Personal financial expectations have remained at record low levels, a result of improved expectations for nominal income increases being offset by even higher expected price increases. Among all families in November 1979, 25 percent expected that their income would increase by 10% or more during the next 12 months, up from 21 percent in November 1978. Among families with incomes of $15,000 or over, income increases of 10% or more were expected by 35 percent of all respondents, up from 24 percent in November 1978. Expected changes in real incomes remained quite pessimistic, however, since inflation is expected to continue at its double digit pace. In December 1979, consumers, on average, expected prices to increase by 10.4% during the next 12 months, up significantly from the 7.9% recorded in December 1978. Overall, almost half (47 percent) of all families expect prices to increase by 10% or more during 1980.

Economic Slowdown Reported

News heard and recalled of recent changes in business conditions remained overwhelmingly negative in the December 1979 survey. Fully eight times as many unfavorable as favorable news items were reported (81 versus 10 percent.) Among all families, 66 percent felt that business conditions had worsened (up from 43 percent in December 1978), while just 21 percent reported that current business conditions were better than a year earlier (down from 31 percent at that time). The majority of the decline in evaluations of current business conditions occurred during 1978 and the first half of 1979; since July 1979 these evaluations have remained largely unchanged.

By year-end, the outlook for future business conditions improved somewhat from the record low levels recorded in mid-1979. The proportion of respondents who expected business conditions to further worsen exceeded the proportion who expected improvement by a margin of 17 percentage points (35 versus 18 percent). The December reading represents an improvement over the negative margin of 32 percentage points recorded in July 1979, and the 25 percentage points recorded in December 1978.

In December 1979, 68 percent of all respondents expected bad times financially in the economy as a whole during the next 12 months, more than three times the proportion who expected good times financially (20 percent). Expected changes in business conditions during the next five years were also quite pessimistic. In the December survey, 66 percent of all families expected bad times in the economy during the next five years, while just 15 percent expected good times financially. As with short term business expectations, this represents a marginal improvement over the July 1979 record low readings but nonetheless remains near record low levels.

Expected change in the unemployment rate returned to its mid-1979 low reading. In December 1979, 61 percent of all families expected unemployment to increase, up from 46 percent in December 1978. Concern with unemployment rather than inflation as the most serious economic problem facing the nation has grown in relative importance, although inflation still dominates public concern. In the December 1979 survey, 28 percent reported that unemployment was the more serious economic problem, up from 23 percent in December 1978; in comparison, 60 percent reported that inflation was the more serious economic problem, down from 65 percent in December 1978.

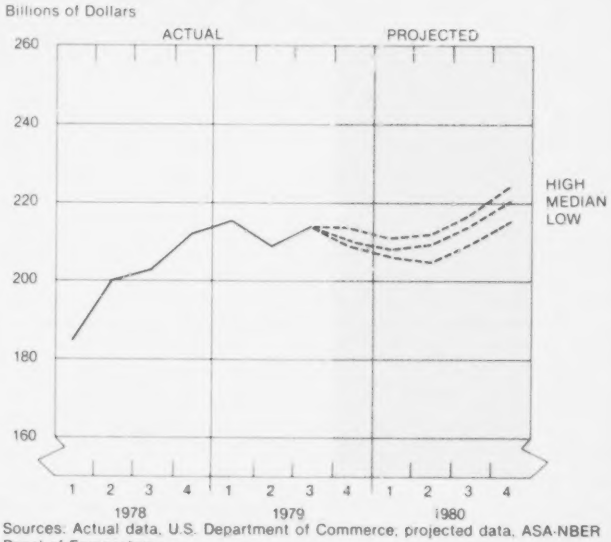
By year-end 1979, the majority of respondents did not expect interest rates to increase for the first time since the December 1977 survey. The proportion of consumers who expected further increases in interest rates declined to 40 percent in December 1979, down from 66 percent in December 1978. Interest rates were expected to go down during the next year by 35 percent of all families, up from just 7 percent in October 1979, and 6 percent in December 1978.

Buying Attitudes Weaken

Favorable attitudes toward buying conditions for large household durables declined significantly in the December 1979 survey. Among all families, 41 percent reported unfavorable attitudes for durables in December, up from 30 percent in December 1978. The proportion who reported favorable buying attitudes toward household durables remained unchanged (53 percent in both December 1979 and December 1978). The growth of unfavorable attitudes toward durable buying conditions can be traced to more frequent mentions of postponement because of high prices which might fall later, and more frequent complaints about high interest rates.

The December 1979 survey recorded a modest improvement in attitudes toward buying conditions for automobiles above mid-1979 lows, although they still remain less favorable than a year ago (see the chart on p. 21). The proportion of respondents who expressed favorable buying attitudes in the December 1978 and December 1979 surveys were nearly identical (42 versus 44 percent), while the proportion holding unfavorable attitudes increased from 37 percent to 47 percent. This significant increase in unfavorable attitudes can be traced to more frequent men-

CONSUMER DURABLE OUTLAYS



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

tions of tight credit conditions and high interest rates (16 percent in December 1979 compared with 6 percent in December 1978), and to a greater concern with the energy crisis (12 percent in December 1979 compared with 3 percent a year earlier). Although the proportion of respondents holding favorable car buying attitudes has remained largely unchanged during the past year, the reasons underlying these views have shifted from buy-in-advance price rationales (21 percent in December 1979 compared with 31 percent in December 1978) to more frequent mentions of low prices (15 percent in December 1979, up from 4 percent a year earlier), and the more frequent mentions of the availability of new fuel efficient models (10 percent in December 1979, up from 2 percent in December 1978).

Buying attitudes for houses declined sharply in late 1979 (see the chart on page 21). Overall, just 27 percent of all families rated buying conditions for houses as favorable in December, down from 46 percent in August 1979. Unfavorable attitudes grew from 48 percent in August 1979 to 66 percent in December. When asked why buying conditions for homes were unfavorable, fully 61 percent of all families mentioned high interest rates as the reason, up from just 27 percent in August 1979.

Summary Outlook

Surveys conducted during 1979 indicate substantial and widespread declines in consumer sentiment across major population subgroups as well as among the several attitude and expectation measures. By December 1979, almost half of all consumers reported that their personal financial situation had worsened during the past year, and two-in-three expected bad times financially in the economy as a whole in the year ahead. Buying attitudes, which were maintained at an elevated level due to buy-in-advance price rationales, have been seriously weakened by high interest rates and limited credit availability. After more than two years of growing pessimism, the state of consumer sentiment at the start of 1980 was similar to that in prior periods of economic recession.

These findings indicate that declines in consumer sales, especially for houses and cars, can be expected to continue into mid-1980. Federal monetary policy has proven to be a potent deterrent to consumer spending. Buy-in-advance psychology flourished in an environment of low interest rates on consumer debt coupled with low returns on savings balances. Although the shift in monetary policy has greatly diminished the appeal of advance buying through the use of credit, it has not allayed fears of continued double-digit inflation. Expectations of double-digit inflation continue to promote buy-in-advance price rationales, and thus will continue to bolster consumer sales in the year ahead. As long as high interest rates and limited credit availability are maintained, however, consumers will have little flexibility other than to react to adverse changes in incomes and prices through cutbacks in consumption spending.

January 1980

Actual and Projected Economic Indicators

seasonally adjusted

SERIES FORECAST BY THE ASA-NBER PANEL															
ECONOMIC INDICATOR	Quarterly Data												Annual Data		
	Actual								Projected				Actual		Proj.
	1978:1	1978:2	1978:3	1978:4	1979:1	1979:2	1979:3	1979:4	1980:1	1980:2	1980:3	1980:4	1978	1979	1980
GROSS NATIONAL PRODUCT	2011	2104	2160	2235	2292	2330	2397	2434	2464	2497	2550	2616	2128	2363	2532
GNP IMPLICIT PRICE DEFLATOR (index, 1972=100)	147.1	150.8	153.5	156.7	160.2	163.8	167.2	171.0	174.4	178.0	181.6	185.0	152.0	165.6	179.8
GNP IN CONSTANT DOLLARS (billions 1972 $)	1368	1395	1407	1427	1431	1422	1433	1425	1410	1400	1407	1417	1399	1428	1409
INDUSTRIAL PRODUCTION (index, 1967=100)	140.8	145.1	147.9	150.7	152.2	151.9	152.3	150.5	147.0	145.0	146.6	149.6	146.1	151.7	147.1
UNEMPLOYMENT RATE (quarterly measure, percent)	6.20	6.00	5.97	5.83	5.73	5.73	5.83	6.2	6.8	7.4	7.4	7.5	6.00	5.87	7.28
CORPORATE PROFITS AFTER TAXES	106.7	122.4	124.6	132.3	142.0	139 3	148.3	140.0	133.0	130.1	132.5	136.5	121.5	142.4	133.0
EXPENDITURES FOR NEW PLANT and EQUIPMENT	144.3	150.8	155.4	164.0	165.9	173.5	179.3	179.0	180.4	183.0	184.0	187.5	153.6	174.4	183.7
NEW PRIVATE HOUSING UNITS STARTED (millions)	1.805	2.102	2.044	2.078	1.615	1.834	1.834	1.67	1.47	1.38	1.43	1.60	2.007	1.738	1.47
CHANGE IN BUSINESS INVENTORIES	22.8	25.8	20.0	20.6	19.1	33.4	14.5	15.0	3.0	2.5	5.4	10.0	22.3	20.5	5.2
CONSUMER DURABLE EXPENDITURES	185.3	200.3	203.5	212.1	213.8	208.7	213.4	210.0	208.5	209.5	214.5	220.5	200.3	211.5	213.3
NATIONAL DEFENSE PURCHASES	97.6	98.2	99.0	101.2	103.4	106.0	109.0	112.0	114.7	117.0	119.0	123.0	99.0	107.6	118.4

SERIES FROM THE GROSS NATIONAL PRODUCT ACCOUNTS															
ECONOMIC INDICATOR	Quarterly Data												Annual Data		
	1977:1	1977:2	1977:3	1977:4	1978:1	1978:2	1978:3	1978:4	1979:1	1979:2	1979:3	1979:4	1976	1977	1978
GROSS NATIONAL PRODUCT	1820	1876	1931	1971	2011	2104	2160	2235	2292	2330	2397	2456	1702	1900	2128
PERSONAL CONSUMPTION EXPENDITURES	1169	1191	1221	1260	1287	1331	1369	1415	1454	1476	1529	1580	1090	1210	1351
DURABLE GOODS	174.3	175.7	178.9	186.4	185.3	200.3	203.5	212.1	213.8	208.7	213.4	215.5	157.4	178.8	200.3
NONDURABLE GOODS	467.7	475.5	483.0	499.2	505.9	521.8	536.7	558.1	571.1	581.2	604.7	631.0	443.9	481.4	530.6
SERVICES	527.1	539.3	558.7	574.1	596.0	609.1	629.1	645.1	669.3	686.0	710.6	733.9	488.5	549.8	619.8
GROSS PRIVATE DOMESTIC INVESTMENT	280.4	300.0	315.7	316.9	327.0	352.3	356.2	370.5	373.8	395.4	392.3	383.3	243.0	303.3	351.5
NONRESIDENTIAL	179.8	186.1	193.2	198.6	203.7	218.8	225.9	236.1	243.4	249.1	261.8	261.3	164.9	189.4	221.1
RESIDENTIAL STRUCTURES	81.3	91.4	95.0	99.9	100.5	107.7	110.2	113.7	111.2	112.9	116.0	115.6	68.1	91.9	108.0
CHANGE IN BUS. INVENTORIES	19.3	22.5	27.5	18.5	22.8	25.8	20.0	20.6	19.1	33.4	14.5	6.4	10.1	22.0	22.3
NET EXPORTS	-9.2	-6.0	-6.3	-18.1	-22.2	-7.6	-6.8	-4.5	4.0	-8.1	-2.3	-7.7	8.0	-9.9	-10.3
GOVERNMENT PURCHASES	380.0	391.6	400.5	412.8	419.4	428.3	440.9	453.8	460.1	466.6	477.8	499.8	361.3	396.2	435.6
DISPOSABLE PERSONAL INCOME*	1250	1286	1323	1361	1395	1437	1477	1525	1572	1602	1640	1679	1185	1305	1458
PERSONAL SAVING RATE (% of disposable income)	4.2	5.1	5.4	5.1	5.3	5.0	4.8	4.7	5.0	5.4	4.3	3.3	5.8	5.0	5.0

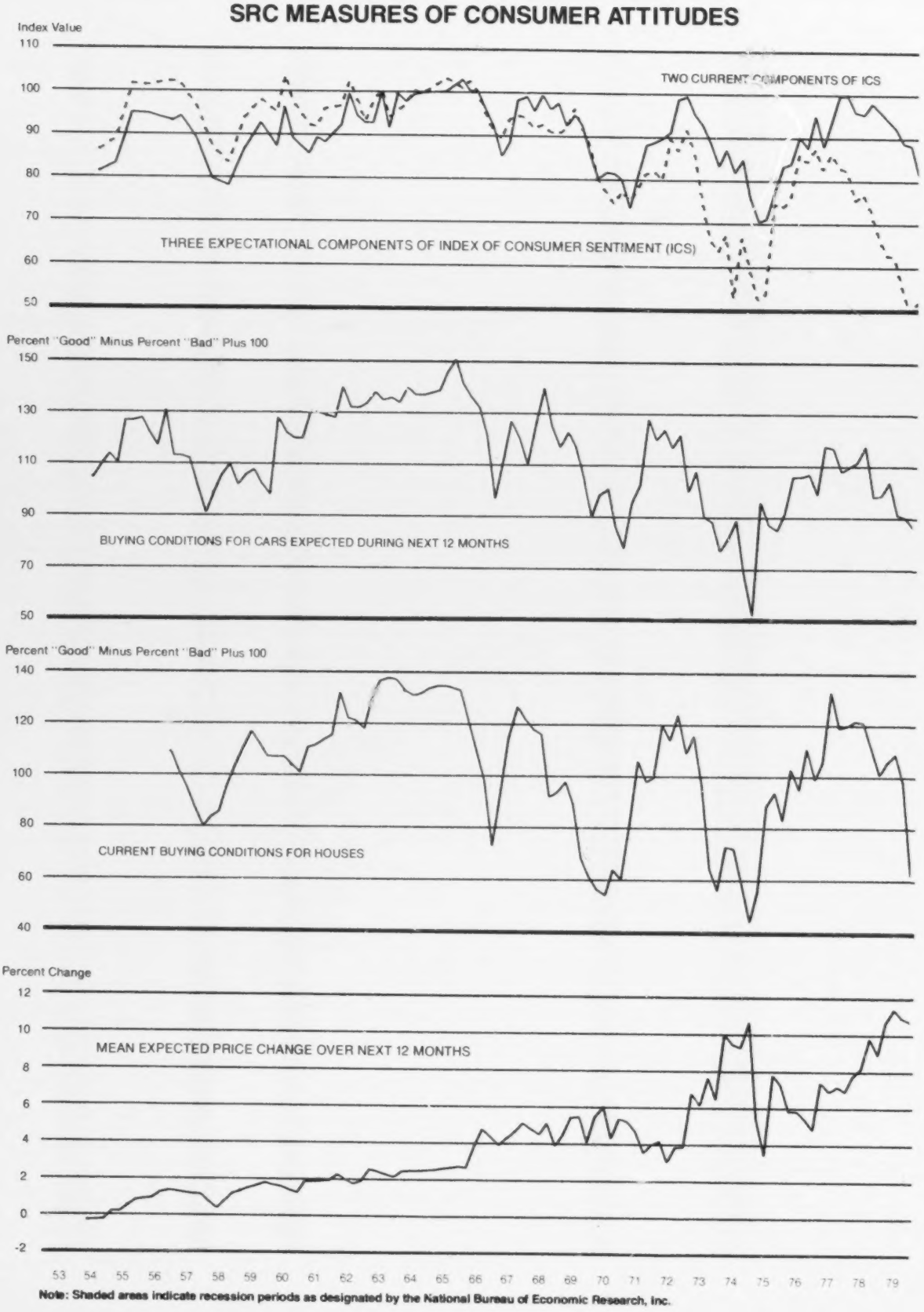
Note: All data are at annual rates and in billions of current dollars unless otherwise indicated.

Sources: Projections: American Statistical Association — National Bureau of Economic Research panel of forecasters. (Forecasts were released in November 1979.)

Actual Data: U.S. Departments of Commerce and Labor, Board of Governors of the Federal Reserve System.

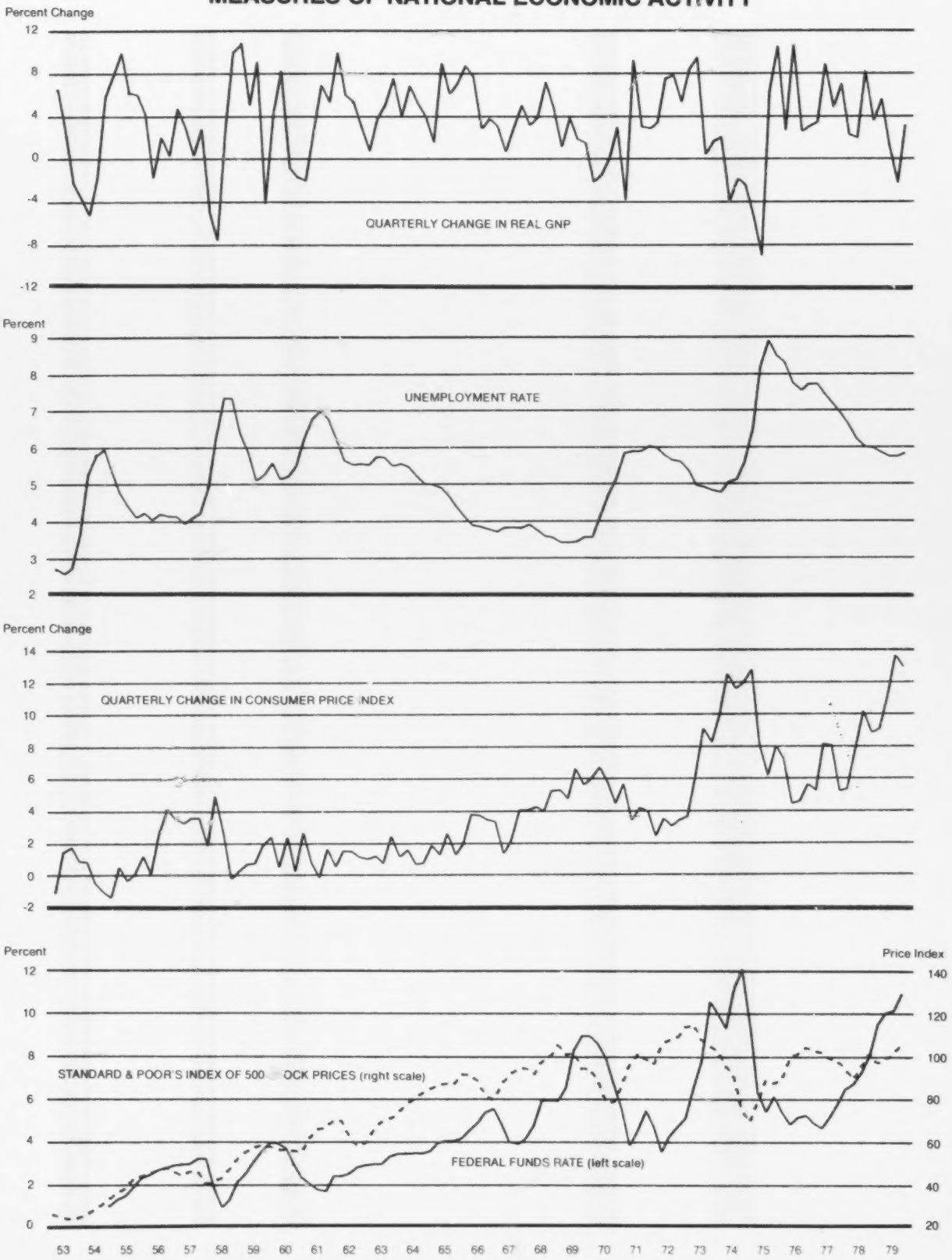
*This series was incorrectly labeled (as constant-dollar GNP) in the Autumn 1979 issue.

SRC MEASURES OF CONSUMER ATTITUDES



Note: Shaded areas indicate recession periods as designated by the National Bureau of Economic Research, Inc.

MEASURES OF NATIONAL ECONOMIC ACTIVITY



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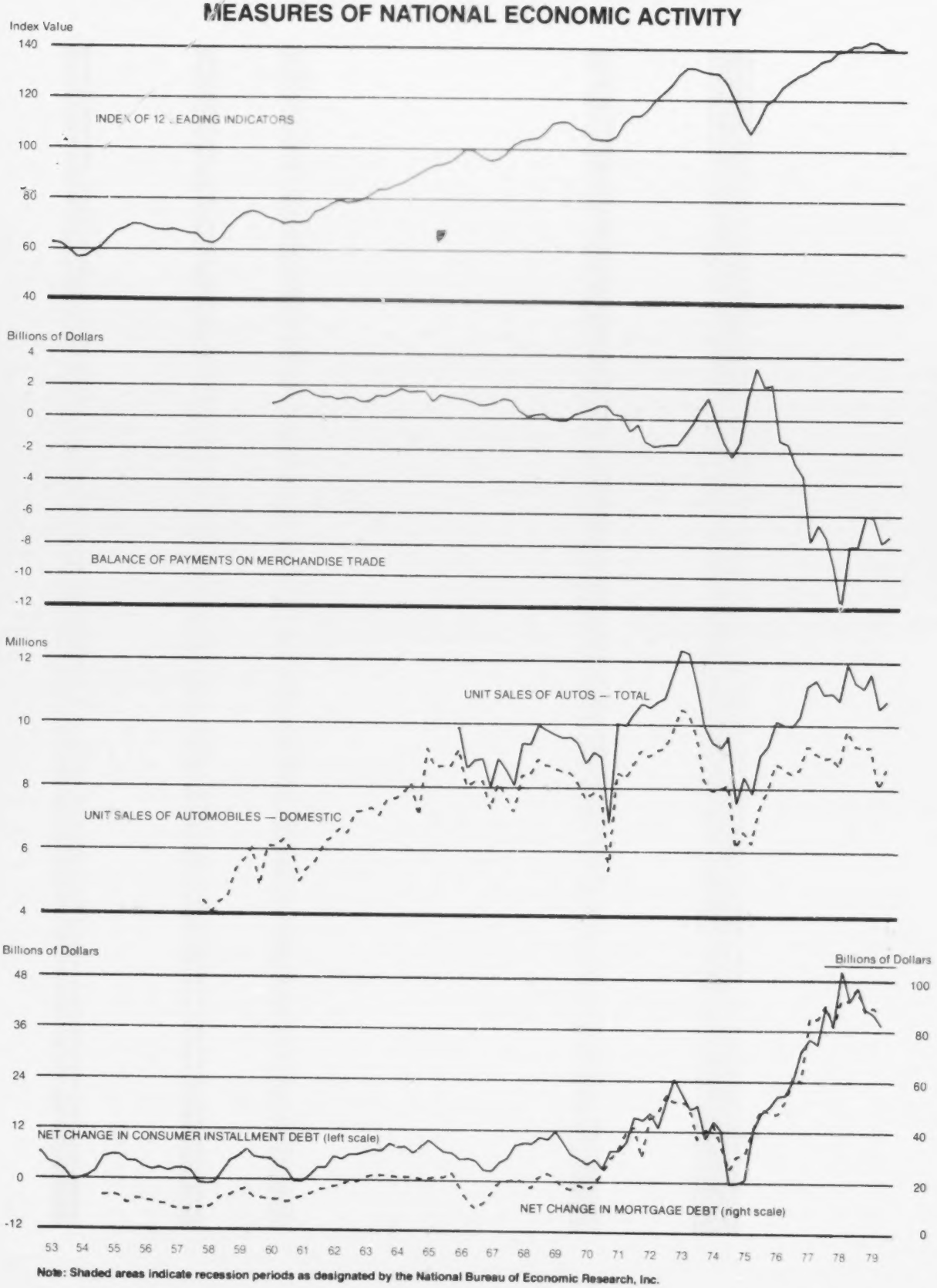
MEASURES OF NATIONAL ECONOMIC ACTIVITY



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ECONOMIC OUTLOOK USA is designed to aid private and public decision makers in achieving a better understanding of the economic and social environment in which they will be operating. The analysis in this publication incorporates direct measurements of the expectations, attitudes and plans of both consumers and business firms with the economic and financial variables traditionally used in forecast models. The philosophy of this publication is that a blend of anticipatory and traditional measures provides richer insights into prospective developments, insights which will produce more consistently reliable forecasts of both economic and social change.

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ECONOMIC PROSPECTS

Actual and projected; seasonally adjusted quarterly data at annual rates

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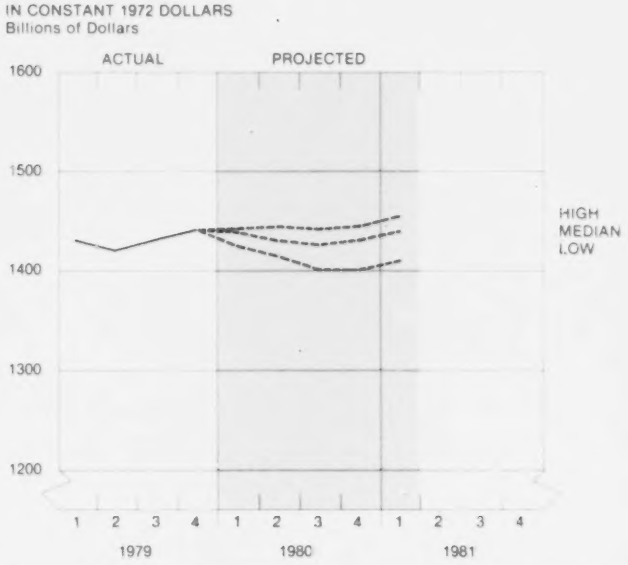

Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

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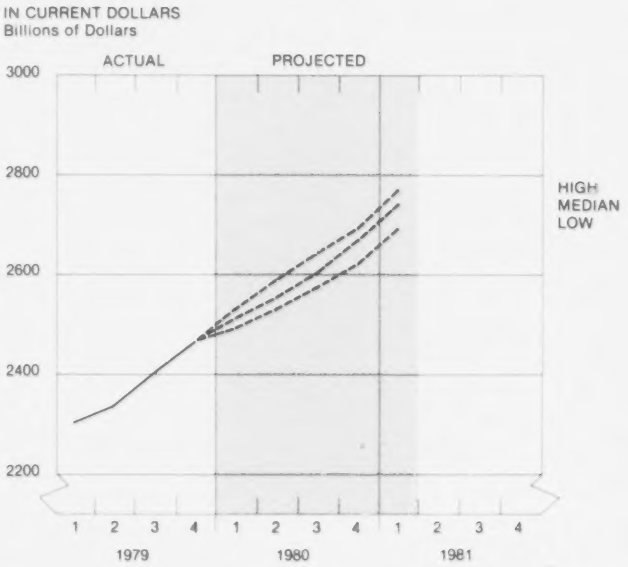


Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

Frequently Used Abbreviations:

ASA	American Statistical Association
BEA	Bureau of Economic Analysis, U.S. Department of Commerce
NBER	National Bureau of Economic Research
SRC	Survey Research Center
197*x*:*y*	*y*th quarter of 197*x*

Conflicts in Economic Policy

Barry P. Bosworth
Senior Fellow
The Brookings Institution

Today the United States is faced with some very basic questions about its ability to solve its economic problems with the currently available policy tools. Increasingly, the traditional emphasis on demand management policies – fiscal and monetary – seems inappropriate to the changing nature of the problems we face. It is not difficult to identify the major problems. They are inflation, declining productivity growth, and the uncertainty of energy supplies. But they are not demand-side problems, and they cannot be solved by simple adjustments of fiscal or monetary policy. At present, economic policy is adrift, and there exists no coherent consensus in the Administration, the Congress, or among the public with respect to an appropriate policy response. The interrelated nature of these problems and the policy conflicts that arise among them continue to frustrate efforts to develop solutions.

I believe that the solution will require a comprehensive policy that integrates all the issues. Of necessity it will impose some significant near-term costs and sacrifices.

Let me review briefly some of the major aspects of the problems.

Inflation

To begin with, the current inflation cannot be interpreted within the traditional context of excess aggregate demand. It is instead a reflection of two separate elements. First, we have inherited a momentum of price and wage increases that have built up out of a decade-long history of past inflation and expectations that it will continue. Within the domestic economy, individual wage and price increases are more the result of defensive efforts to keep up with the inflationary excesses of others rather than reflective of any shortages. While most of the participants realize that they do not gain from this process, no one dares to restrain his own actions because of fears that others will not. This underlying cycle of wage and price increases has accelerated from about 6 percent annually in 1976-77 to about 10 percent today.

Second, this ongoing process is exacerbated and raised to new heights by shocks or disturbances that originate in major commodity markets and by a continuing series of government actions that push up costs and prices in the private sector. At times, excess aggregate demand has been an important factor. But in recent years specific problems in the markets for food, energy, and housing have been responsible for most of the acceleration of inflation. These disruptions in major individual markets can have a dramatic direct effect on the average inflation rate. But a secondary and longer lasting impact results from the fact that a surge of inflation that originates with sharp price increases in a few markets rapidly spreads throughout the economy as other participants accelerate their own wage and price increases in an effort to catch up.

The importance of the special market problems is most evident in the consumer price index (CPI) in recent years.

	Annual Percentage Rate of Increase (December to December)			Weight in the
	1977	1978	1979	CPI
Total CPI	6.8	9.1	13.3	100.0
Food	8.2	11.9	10.2	18.2
Energy	7.2	8.0	37.4	8.5
Home purchases and finance	10.3	13.0	21.5	19.9
Other items	5.8	6.8	7.6	53.4

The three special sectors account for the great bulk of the 6.5 percentage point rise in the inflation rate between 1977 and 1979. In recent months, however, the feedback effect on other prices and wages has become more substantial. The danger for 1980 is that efforts of wage earners and others within the domestic economy to catch up with these price increases will lead to a further escalation of the underlying momentum of the inflation.

Productivity Growth

The problem of inflation is being further compounded by a sharp slowdown in productivity growth. Labor productivity within the private nonfarm economy expanded at an average annual rate of 2.8 percent in the 1948-65 period, 2 percent between 1965 and 1973 and only 1 percent in the last five years. During 1979 it actually declined by 2 percent. This is the major factor behind the fact that real earnings of American factory workers are no higher today than in 1969. Per capita income growth has been maintained only because the government has sharply expanded the share of transfer payments in the total budget. Yet these trends cannot be maintained (defense costs are rising and employment opportunities will be limited), and the outlook for real incomes in the 1980s is dismal.

Energy

Finally, an effective anti-inflation policy cannot be developed in the face of the continued uncertainty of energy supply and prices. The effort to obtain voluntary restraint on wages and prices during 1979 was destroyed by a 37 percent rise in energy prices. Our imported oil bill has soared from $4 billion in 1972 to $39 billion in 1978 and is currently running at an annual rate in excess of $60 billion. We cannot earn the foreign exchange with our exports to pay this bill, and the continuing downward pressures on the value of the dollar are adding to the inflation by raising the costs of imported goods. It is futile to believe that we can exercise effective restraint on the prices of foreign oil producers when our own demands maintain spot market prices above the official cartel prices, and it seems very risky to ignore the possibility of major supply disruptions in future years.

In the face of these difficulties, there are severe limitations on fiscal and monetary policies. While they can control the level of demand, control over demand does not translate into an effective control of inflation. In the extreme case, fiscal and monetary restraint can break the momentum of the current inflation, but the costs in terms of unemployment will be enormous. On the basis of the average experience of past recessions, it will require an increase in unemployment of at least one million persons, sustained for at least two years, to reduce inflation by one percentage point. Even with 9 million unemployed in 1975, the underlying inflation rate never dropped below 6 percent. Finally, a highly restrictive monetary policy is directly counter to the professed desire to stimulate capital formation. A decline in demand and high borrowing costs will quickly wipe out any benefits that might flow from increased tax incentives for investment.

The continued attempt throughout the 1970s to view the inflation problem within the confines of an excess demand framework – as a conflict between unemployment and inflation goals – has led to repeated switches of direction in fiscal and monetary policy. The roller-coaster nature of these policies, the uncertainty, and the mistakes of investment planning that resulted must be significant elements of the current problems of slow productivity growth and capacity imbalances.

I do not believe that these problems can be met through an incremental adjustment of traditional policies because of the conflicts that emerge and the difficulties of maintaining support for a policy of gradualism. Thus, it is desirable to widen the range of potential policies for consideration and to discuss the construction of a comprehensive program that addresses all the problems in a coordinated fashion.

Demand Policy

A general policy of some demand restraint must be one element of the program. Alternative policies might serve as a complement, but no anti-inflation policy can be effective in the face of general market pressures that are forcing up either prices or wage rates. Demand restraint can, however, be made more consistent with other goals by shifting the fiscal-monetary policy mix. A shift toward a more restrictive fiscal policy offset by an easing of monetary policy would put a larger portion of the burden on consumption and a smaller burden on investment – thus improving the climate for capital formation.

The recent budget proposals of the Administration illustrate the difficulties of such a shift in the mix of policy. The large upward revisions of expenditures for fiscal year (FY) 1980 explain part of the puzzle of what happened to the widely-expected recession. The projected deficit declines in 1981 and later years only because revenues rise from 19.5 percent of GNP in FY 1978 to 21.7 percent in FY 1981 and 22.7 percent in FY 1983. This ratio of taxation to GNP has not been reached since World War II. There is a desire to raise defense expenditures, provide tax incentives for capital formation, offset the effects of inflation on income taxes, balance the budget, and maintain the funding for current social programs. All that cannot be done, and the Congress will be faced with difficult choices in the next few years.

Energy Policy

From the perspective of energy policy and foreign pressures on the exchange rate, petroleum imports need to be cut by a significant amount from current levels. That can best be accomplished by a direct limitation on imports. Such an action will, however, create a shortage within the domestic market; and the U.S. will have to choose between direct rationing or price increases to reduce demand. As long as the rationing option reflects some form of a "white coupon" system, the choice is largely political. The important economic issue is to cut imports.

Wage-Price Policy

There is no policy that can break the current momentum of the wage-price spiral without high costs. A mild recession is too weak and voluntary incomes programs have lost their credibility. Given a desire to slow the inflation, the choice is rapidly being reduced to one of severe recession versus wage-price controls.

Past experience indicates the major problems and risks of controls. But the lessons learned in those periods can also be used to avoid some of the problems. No incomes policy can succeed in the face of shortages, and the previous effort to use controls as a substitute for fiscal-monetary restraint was a mistake that led to distortions and exacerbated the supply problem. There is still the possibility that a combination of controls and demand restraint can reduce the magnitudes of unemployment and idle capacity substantially below those required by a policy of relying on demand restraint alone.

When government adopts a voluntary or mandatory wage-price program, however, it becomes responsible in the public's mind for all prices – even those set by relatively competitive markets or by external forces. Thus, government efforts to stabilize prices in the areas of food, energy, and housing take on added importance. Price and wage controls cannot be applied to situations of shortages; yet no program can succeed if it ignores inflationary developments in these fundamental areas. In both 1973 and 1979, the government's anti-inflation program was severely damaged by developments in these markets for which the government had no response.

A stabilization of grain prices is the key element to avoiding sharp increases in food prices. If the government focuses on stabilizing the grain market, there is a very limited potential for inflation shocks in other areas that cannot be quickly reversed by normal market responses. In addition, a policy of reducing support prices for dairy products and removing many of the marketing restrictions on fruits and vegetables could provide some direct benefits in the form of lower prices.

The recent pattern of soaring housing prices is a classic case of excess demand. That demand is fueled by a speculative element reflecting strong expectations of continuing future inflation, an increase in the population of homeowning age, and regulation and other government actions that have sharply raised the availability of mortgage lending funds. It is not possible to expand supply in the short run by an amount sufficient to meet these pressures, and the excess demand has spilled over into large price increases. The current high market interest rates will reduce the demand for housing; but they will also reduce supply by restricting the funds for construction

loans to builders. Alternative measures could relieve some of the demand pressures while maintaining a higher level of construction. These would include reducing the lending of the federally sponsored agencies and involving selective credit controls to raise downpayment requirements as a means of limiting speculation.

Government Actions

In addition, an incomes policy is extremely dependent upon a public perception of a strong government commitment to its objectives. The government cannot expect restraint from the private sector unless it can demonstrate a willingness to overcome the pressures of individual interest groups and develop a more effective microeconomic policy that addresses the inflationary effect of its own actions. The government must develop an effective framework for evaluating the economic consequences of its administrative and regulatory actions that lie outside the normal budget process.

Productivity Growth

There are severe limits on the short-term effectiveness of government policies to promote productivity growth, but the avoidance of another episode of severe demand restraint, additional tax incentives to promote investment, and expansion of research and development are measures that operate in the right direction. The arguments for a significant expansion of tax incentives for capital formation seem particularly strong because the interaction of inflation and the existing tax structure has increased the effective tax burden. While the precise magnitude of the effect on investment is subject to dispute, the general conclusion of past studies agree that it is significant.

Conclusion

A program of general wage-price controls, restrictions on housing and energy demand, sharp cutbacks in government programs, and a continuation of slow demand growth are not easy measures to sell even on a temporary basis. But it may be that government today can address its problems only within such a crisis-type framework. The one constant element in the inflation, for example, has been that each successive round of government policy has consistently underestimated the magnitude of the problem. Yet each failure contributes to a loss of public confidence that government can solve the problems, reducing the probability that future policies will succeed. At the same time, we should have no illusions that these issues will disappear. We will not face a sudden crisis; but, without strong action, the U.S. is faced with a future of rising inflation and gradual but continued erosion of real income.

April 1980

Dealing with Inflation: Policy Alternatives

F. Thomas Juster
Director, Institute for Social Research
Professor of Economics
The University of Michigan

Major Economic Policy Issues

The three major issues facing economic policy during the next several years are controlling the inflation rate, increasing real growth rates via improving productivity performance, and finding ways to reduce dependence on imported oil.

These problems are obviously interrelated, but less so than many suppose. For example, it is entirely possible to adopt policies which will control the inflation rate while doing nothing for stimulating rates of real growth and improving productivity; conversely, it is possible to adopt policies which will improve real income growth and productivity, while having very little impact on inflation rates. In particular, I suggest that the oft-repeated notion that improving productivity will take care of the inflation problem is simply wrong: in the short run, policies designed to improve productivity (such as increased investment) may even exacerbate the inflation problem, and even in the long run, the inflation benefits are a modest by-product of a better productivity performance. And getting better control over the volume of imported oil will have its chief beneficial effect on preventing price shocks of the sort that adversely impact the overall inflation rate, with some possibility that reduced oil imports would strengthen the dollar in foreign exchange markets and thus lessen or even reverse the inflationary pressures resulting from adverse movements in the terms of trade against the U.S.

Inflation Policies

To formulate policies designed to deal with inflation, one has to understand the roots of the present inflation. I share the opinion of those who hold that the present inflation has little to do with excess demand—the conventional cliche of too much money chasing too few goods, thus driving up prices. Rather, our present inflation is largely a consequence of the momentum of past increases in cost being passed on into prices, and the nearly universal expectation held by decision-makers that inflation will continue inexorably into the future. Employers do not sign wage contracts calling for increases between seven and 10 percent because they are afraid that employees would otherwise move to different jobs. Rather, they sign such contracts because everyone else is signing such contracts, and because they are confident that such increases can be passed along via higher prices.

There are basically only four possible "solutions" to the inflation problem: one is to leave it alone on the assumption that nothing can really be done about it; the second is to bring down the inflation rate gradually, by means of moderately tight macroeconomic policies (monetary and fiscal), maintained over a long period of time; a third is to break the cycle of momentum and expectation rapidly by initiating drastic macro policies; and the fourth is some variety of controls, either voluntary or involuntary.

The principal risk of the first policy—ignoring inflation because doing anything about it is too costly—is simply the potential damage to economic and political institutions that might be associated with a policy that allowed the price level to double every six or seven years. Worse still, it is arguable that aiming at letting the inflation rate persist at double-digit rates will inexorably lead to escalation, and we will find the price level doubling every three or four years instead of every six or seven, then every other year instead of every three or four, etc. While I do not think that is inevitable, there is enough risk in it so that it appears to be an unappetizing alternative, possibly the worst of the four.

Gradualism obviously has much to recommend it, and has been the policy of every administration and congress over the last decade. Unfortunately, the evidence suggests that it does not work. The basic problem with the policy of gradual reduction of the inflation rate—from 10 to nine to eight over several years—is that the immediate impact of any conventional macro-policy designed to decelerate inflation rates is not on inflation at all, but on real output growth. It is only after real output growth has been adversely affected that price inflation begins to be impacted by fiscal and monetary constraints. Thus the initial results of restrictive fiscal and monetary policy is that we get a recession, with virtually no impact on prices. Eventually, prices will begin to decline unless we are so unlucky as to run into adverse shock of one kind or another—oil, food prices, etc.

To both the public and political decision-makers, the policy of gradualism thus appears to provide almost no immediate benefit, and to entail noticeable costs. As a result, people get disenchanted with it. If the U.S. were a very patient society, with a strong tradition of tolerance for error and with long-term economic planning mechanisms that were immune to short-term reverses, gradualism might work. But this is not a very patient country, either in terms of popular reactions or political ones; hence I have almost no confidence that gradualism will actually be successful.

While the problem of gradualism is that it makes progress on the inflation side too slowly to generate continued support for it, the problem with the third policy option—severe economic constraints—is that we are not quite sure now far the policy will have to be carried to make it work. There is little doubt that sufficiently severe monetary and fiscal constraints would in fact reduce the inflation rate down to any desired level. But no one can predict with confidence how far unemployment rates would have to be pushed, and how much real output would

Note: This article is adapted from testimony given before the House Budget Committee.

have to decline, before inflation rates are pushed down to a tolerable level. Some would argue that the mere threat of maintaining a severe constraint policy until inflation rates come down will insure that inflation rates will in fact come down rapidly at relatively modest costs in terms of foregone real output and economic hardship. That case, made by many distinguished economists of conservative persuasion, is by no means implausible. The problem is that no one can guarantee that such a policy would not produce an economic disaster, and that risk seems unacceptable.

Wage and Price Controls

If leaving inflation alone is intolerable, gradualism won't work, and tough constraints imply unacceptable risks, we are left with some kind of controls policy as the best of a bad lot of policy alternatives. Critics will hasten to point out that controls have never worked; that they treat symptoms and not causes; that they will merely suppress inflation for awhile before eventuating in a new explosion of price increases when they can no longer be maintained; and that they are inequitable, impossible to administer, and create pernicious evasion incentives which distort production decisions.

Those arguments need to be taken seriously, and some of them are clearly correct: controls have not generally worked well in the U.S. during past periods when they have been used; they are inequitable; they do create pernicious incentives to evade; and they are difficult if not impossible to administer. Still, they are worth discussing as a serious instrument of economic policy under the present set of circumstances, where nothing else seems to have much prospect, by itself, of reducing inflation rates at reasonable cost and with reasonable risks.

This is not the place for an extended discussion of the issue, but I will simply note some characteristics of controls which seem to me often overlooked in recent public discussion:

- If the basic inflation problem is not excess demand but momentum from past price increases and expectational phenomena, controls do treat root causes and not symptoms: one way to impact momentum and change expectations is simply to freeze prices and wages, since momentum and expectational forces are impacted by interrupting the historic inflation path.
- Control in this country has usually been put on when the economy is strong and there is the threat of excess demand. Under those circumstances, incentives to evade are powerful. But controls put in place during a period when the economy is weak create less strong incentives to evade. The lesson is that a precondition for successful implementation of controls is that sluggish demand conditions must be maintained whenever controls are in effect.
- While it is true that controls are inequitable, since they freeze prices and wages in various stages of catch-up relative to other prices and wages, inflation is also inequitable. It is far from clear that controls are more inequitable than inflation.
- Incentives to evade controls are not only a function of the underlying strength of demand, but also a function of whether people generally visualize that there is a crisis that needs to be dealt with or whether they see the world in "business as usual" terms. Controls can only work if the community is psychologically prepared to adopt a crisis strategy because they perceive that a crisis is at hand. Perhaps that time is now, perhaps not.
- Anyone who has administered price controls can testify to the impossibility of achieving equity, the extremely high cost of administrative decision-making, and the potential for strangulation by red tape of various sorts. A possible solution is to have legally enforceable controls with no bureaucratic apparatus to administer them, relying on normal sources of statistical information to uncover evasion and on public acceptance to insure compliance. While that can only work for a limited period of time, controls designed to stop momentum and cut into expectations should be viewed as temporary anyway.

Preconditions for Successful Controls Policy

The principal point of this analysis is not that controls are clearly the policy of choice in the present environment, but rather that controls are a possible policy, and they should be seriously considered. More importantly, certain preconditions are essential for any controls policy to have a reasonable prospect of success. These preconditions are that: controls can only be put in place effectively when the economy is weak on the demand side, and they must be removed while the economy is still weak; it must be recognized that controls are inequitable, and their justification is simply that they are no more inequitable than alternative policies; controls will not be successful if any substantial number of prices and wages are exempted as a consequence of perceived inequity, since there is literally no price or wage adjustment for which a plausible equity case cannot be made; and controls are most likely to be effective when implemented in conjunction with conventional policies designed to modify or reverse cost-increasing pressures (payroll taxes, agricultural price supports, import quotas, etc.)

Consumers Remain Pessimistic

Richard T. Curtin
Director, Surveys of Consumer Attitudes
Survey Research Center
The University of Michigan

Small Rebound in Consumer Sentiment

The Index of Consumer Sentiment was 66.9 in the February 1980 survey, up 3.6 Index-points from November 1979. Although the February 1980 figure represents a modest improvement over mid-1979, the Index remains 7.0 points below the year-ago level of 73.9, and just 9 points above the all-time record low (see the ICS chart). The recent improvement is of marginal significance, and does not indicate a reversal in trend.*

Among families with incomes of $15,000 or more, the Index of Consumer Sentiment stood at 60.2, up 3.0 points from November 1979, but 10.7 Index-points below February 1979. Families with incomes of $20,000 or more posted somewhat less improvement, as the Index figure was up 2.5 points from November 1979 and down 13.5 points from February 1979.

The largest recent improvement in consumer sentiment was recorded among residents of the Western region. The Index figure among Western residents rose from 61.9 in November 1979 to 72.8 in February 1980, more than a 10-point improvement. Residents of the Northest recorded a more modest improvement in consumer sentiment from November 1979 (59.8) to February 1980 (63.0). In contrast, among residents of the North Central (65.9) and Southern (65.7) regions, consumer sentiment has remained largely unchanged during the past three months.

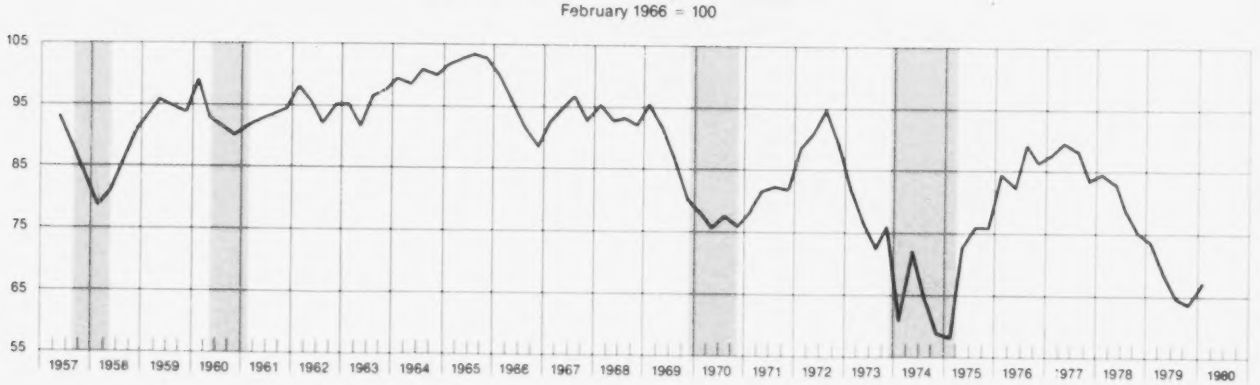
*Indeed, the March survey data revealed a substantial drop in the Index—to the all-time low value of 56.5—and thus suggest a continuation of the downward trend observed since mid-1977.

Divergent Trends Continue

Trends in the current and expectational component groups of the Index of Consumer Sentiment continue to show divergent patterns (see Table 1 and the chart on page 45). Consumer evaluations of their current financial situation decreased by 14 Index-points from February 1979 to February 1980, more than twice the decline recorded during the preceding year. Evaluations of current buying conditions for durable goods declined by only 4 Index-points during the past year, and by just 7 Index-points in total during the past three years. In contrast, expected business conditions have declined by much larger amounts during the past three years, with proportionately less of the decline being recorded during the past year. Personal financial expectations remained unchanged on balance from February 1979 to February 1980, after falling more than 20 Index-points in the preceding two years.

This pattern of decline differs in several ways from the decline recorded prior to the February 1975 lowpoint in the Index of Consumer Sentiment. Overall, the recent decline in consumer sentiment has been less severe (20.6 Index-points) than the prior decline (30.1 points). Although recent declines in personal financial expectations were as steep as in the earlier period, greater declines in business expectations were recorded in the 1972-75 period. More importantly, evaluations of buying conditions for durables declined by more than 37 Index-points in the 1972-75 period, compared with a total three-year decline of just 7 points for the 1977-80 period. These smaller declines in buying attitudes toward durable goods have been responsible for maintaining consumer sentiment at a higher level than in the prior recession period. A persistent buy-in-

INDEX OF CONSUMER SENTIMENT



Note: Shaded areas indicate recession periods as designated by the National Bureau of Economic Research, Inc.

Table 1. CHANGE IN THE INDEX OF CONSUMER SENTIMENT AND ITS COMPONENTS DURING TWO PERIODS

Time Period	Index	Index Components: Current: Personal Finances	Current: Buying Conditions	Expected: Personal Finances	Expected: 12-month Business	Expected: 5-year Business
February 1980 Level[a]	66.9	85	134	99	55	60
Yearly Change[b]						
1979-1980	-7.0	-14	-4	+1	-20	-11
1978-1979	-10.4	-7	-1	-11	-32	-18
1977-1978	-3.2	+7	-2	-12	-7	-8
Net 3-year change	-20.6	-14	-7	-22	-59	-37
February 1975 Level[a]	58.0	81	100	103	45	47
Yearly Change[b]						
1974-75	-2.9	-7	-21	+3	-0-	+1
1973-74	-20.5	-18	-15	-18	-55	-26
1972-73	-6.7	+2	-1	-8	-33	-23
Net 3-year change	-30.1	-23	-37	-23	-88	-48

[a]Table entries are the sample proportions giving favorable replies minus the proportion giving unfavorable responses, plus 100.
[b]February surveys.

advance psychology has characterized consumer reactions to mounting inflation in recent years. During the past year, advance buying has begun to yield to postponement due to high interest rates and tight credit conditions, expecially for houses and automobiles.

Personal Finances Strained

Families more frequently reported in February 1980 that their financial situation had worsened (45 percent) rather than improved (30 percent) during the past year. This plurality of unfavorable evaluations was also recorded in the November 1979 survey, and is significantly less favorable than year-earlier readings. The decline in favorable evaluations of financial progress during the past year was greatest among families with incomes of $15,000 or more. From February 1979 to February 1980, the proportion of high-income families who reported improvement in personal finances fell from 50 to 34 percent, while the proportion who reported worsening finances rose from 26 to 42 percent. Compared with a year earlier, high-income families more frequently mentioned inflation (31 to 45 percent) as a reason for their worsening financial situation; they less frequently mentioned income increases (44 to 39 percent) and more frequently mentioned income declines (10 to 15 percent).

Personal financial expectations have remained at or near record low levels during the past year. In the February 1980 survey, as many families expected their financial situation to worsen (26 percent) as to improve (25 percent), nearly identical to the level recorded a year earlier. This unfavorable outlook was not due to less favorable income expectations, but, rather, was due to less favorable price expectations. In February 1980, 29 percent of all families (up from 23 percent in February 1979) expected their income to increase by 10% or more during the next 12 months. More than one-third of all families with incomes above $15,000 expected income increases of 10% or more. Despite these widespread expectations for nominal income increases, when asked whether they expected their family income or prices to increase more during the next year, just 14 percent of all families (15 percent among high-income families) expected real income improvement.

Long-Term Double-Digit Inflation Expected

In each quarterly survey since February 1979, consumers have reported that they expected double-digit inflation in the year ahead. In February 1980, 50 percent of all families expected price increases of 10% or more during the next 12 months. Overall, the average expected rate of inflation was 10.7% in February 1980, unchanged from the February 1979 reading (see the Chart on page 45). Although no increase was recorded in mean short-term price expectations during the past year, long-term price expectations increased significantly. The expected average annual rate of inflation during the next 5 to 10 years increased from 8.6 percent in February 1979 to 10.4 percent in February 1980 (see Table 2). This indicates that double-digit inflation has come to represent the long-term prospect, not a temporary aberration.

Table 2. CONSUMER PRICE EXPECTATIONS

Expected Rate of Inflation During the Next...	February 1979	February 1980
12 months	10.7%	10.7%
5-10 years	8.6	10.4

Interest rate expectations have improved significantly since the November 1979 survey, although the near-majority continued to expect increases. Following the November 1979 change in monetary policy, fewer respondents expected further increases and more frequently expected declines in interest rates. In February 1980, 47 percent of all families expected interest rates to increase, down from 62 percent in November 1979 and 54 percent in February 1979. Declines in interest rates were expected by 21 percent of all families in February 1980, up from 15 percent in November 1979 and 13 percent in February 1979.

Business Expectations Improve

Since mid-1979, evaluations of current business conditions have remained unchanged at greatly depressed levels, while expectations for future change in business conditions have continued to improve from historic lows. The expectation that business conditions would worsen in the year ahead fell from 39 percent in August 1979 to 27 percent in February 1980. Although consumers expect somewhat better business conditions, they have yet to report improvement. In February 1980, 67 percent of all families reorted that business conditions had worsened during the past year, unchanged from the August 1979 lowpoint. On balance, consumers continue to view short- and long-term business prospects as unfavorable, despite the improvement since mid-1979. Bad times rather than good times were expected for the economy as a whole during both the next 12 months and 5 years by a three-to-one margin.

Expected trends in unemployment were more favorable in February 1980 than in late 1979, but remain less favorable than year-earlier readings. Among all families 46

percent expect unemployment to increase during the year ahead, down from the 54 percent recorded in November 1979, but above the 34 percent recorded in February 1979.

Confidence in government economic policy to combat inflation and unemployment improved somewhat since late 1979, and is now comparable with year-ago readings. In February 1980, 34 percent of all families rated government policy as poor, below the 39 percent recorded in November 1979, and somewhat above the 31 percent recorded in February 1979. In both February 1979 and February 1980, just 12 percent of all families rated government policy favorably.

In the February 1980 survey, respondents were asked how they thought the international situation involving Iran and Russia would affect domestic business conditions. Almost two-in-three respondents felt that the international crisis would have an unfavorable impact on business conditions. Just 18 percent expected the international situation to benefit domestic conditions. Short- and long-term business expectations were strongly associated with these different views, but not buying attitudes.

Buying Attitudes

Attitudes toward buying conditions for houses, cars, and durables were improved in February 1980 over late 1979 readings. Compared with year ago levels, favorable attitudes toward buying conditions for housing declined the most, while durable-goods buying attitudes declined the least. Unfavorable attitudes were more widespread in those markets where buy-in-advance psychology has been offset by heightened concern over high interest rates and the availability of credit. This shift in concern has had the greatest impact on the housing market and the least impact on attitudes toward market conditions for durable goods. Market conditions for automobiles have recorded only intermediate declines, despite the diminished appeal of advance buying and increased concern with credit, because of price discounts and greater interest in new fuel-efficient models.

In February 1980, favorable attitudes toward durable buying conditions were held by 60 percent of all families (essentially unchanged from the 61 percent recorded in February 1979), and unfavorable buying attitudes were held by 26 percent (compared with 23 percent recorded in February 1979). From 1977 to 1980, the February surveys have recorded favorable durable buying attitudes in the narrow range of 59 to 61 percent; unfavorable attitudes, however, have increased in frequency from 18 to 26 percent during this same time. Favorable durable buying attitudes continue to be upheld by the one-in-three respondents who mentioned buy-in-advance price rationales. Recent increases in unfavorable evaluations were due in part to high interest rates, mentioned by 9 percent of all families in February 1980, up from 3 percent in February 1979.

Favorable car buying attitudes were held by 47 percent of all families in February 1980, up from 38 percent in November 1979 and 43 percent in February 1979. As with the durable goods market, favorable attitudes toward market conditions for automobiles have remained in the narrow range of 43 to 48 percent in the February surveys from 1977 to 1980, while unfavorable evaluations have increased from 30 to 45 percent during this period (see the chart on page 45). Unlike the durable goods market, fewer respondents mentioned buy-in-advance price rationales with regard to the automobile market in February 1980 (19 percent) than in February 1979 (29 percent), and more frequently mentioned good buys at low prices (7 to 17 percent) and the availability of new fuel-efficient models (4 to 14 percent). The increase in unfavorable car buying attitudes during the past year can be traced to more frequent complaints of high interest rates (6 to 14 percent) and greater uncertainty associated with the energy crisis (3 to 13 percent).

Attitudes toward market conditions for houses improved in the February 1980 survey over the greatly depressed November 1979 levels. In February 1980, 36 percent of all families reported favorable buying conditions for houses, up from 28 percent in November 1979, but remaining below the 49 percent recorded a year ago. Unfavorable house buying attitudes were held by 59 percent of all families in February 1980, down from 66 percent in November 1979, but above the 43 percent recorded in February 1979. During the past two years, favorable house buying attitudes declined from 55 percent in the February 1978 survey to 36 percent in the February 1980 survey, while unfavorable attitudes increased from 33 percent in February 1978 to 59 percent in February 1980 (see the chart on page 45). The significant decline in favorable attitudes toward market conditions for houses over recent years can be attributed both to a significant reduction in buy-in-advance price rationales (falling from 36 percent in February 1978 to 20 percent in February 1980) and to increased concern over credit availability and high interest rates (up from 8 percent in February 1978 to 24 percent in February 1979 and 50 percent in February 1980).

Summary Outlook

The February 1980 survey indicates that the downward momentum in consumer attitudes and expectations has yielded temporarily to modest improvement. Although expected changes in business conditions have grown more favorable during the past six months, current business conditions continue to be rated unfavorable by the majority. Moreover, consumers now expect double-digit inflation to continue in both the near and long term.

Buying attitudes posted some improvement in early 1980 in response to price discounts. During the past year buying attitudes have grown more unfavorable in those markets where buy-in-advance psychology has been offset by concern with high interest rates and the availability of credit. The recent declines in sales of houses and vehicles can be attributed to this shift. Buying attitudes toward durable goods have thus far been least affected by these concerns – although these data were collected before the new credit controls were announced. Greater declines in consumer sales of durables can be expected, along with continued low sales for houses and cars.

March 1980

Coping With Inflation

Muriel Converse, Richard T. Curtin, and Maureen Kallick
Survey Research Center
The University of Michigan

In the first half of 1979 businesses and households in the United States were confronted with a rate of inflation substantially higher than that experienced during the previous 5-10 years, a period itself characterized by price increases significantly higher than the norm during the 1950s and most of the 1960s. Reactions to this accelerated inflation were varied as consumers and business firms attempted to cope. In order to assess coping mechanisms, parallel studies based on representative samples of consumers and business firms in the manufacturing, wholesale, and retail sectors of the economy were conducted by the Economic Behavior Program of SRC during the summer of 1979.

Inflation is one economic fact of life of which consumers and business managers are well aware. In recent nationwide surveys, consumers have named inflation as the number one problem facing the nation, as well as the most important problem facing their families. Although rapid price increases have aroused public outcry since the late 1960s, until recently double-digit inflation was viewed as a temporary aberration, not as a long-term prospect. The persistent inflationary environment has had a pervasive impact on consumers. Inflation has now become a primary factor in shaping consumer spending and saving decisions, and these decisions affect business conditions and expectations. Below we discuss business firms' reactions to inflation first, followed by consumers' reactions.

BUSINESSES

Although many economic agents believed themselves hurt by inflation, more than half of U.S. business establishments in the manufacturing, wholesaling and retailing sectors of the economy said they were not. In fact, seven percent felt they had gotten ahead of inflation.

Inflation did not affect all sectors evenly, and a considerably larger proportion of retailers (almost 60 percent) than of wholesalers or manufacturers (somewhat over 40 percent each) reported they were *not* hurt. This implies that either the negative aspects of inflation relative to the positive aspects did not impinge as heavily on the retail sector as on other sectors during this period, or that retailers as a group were more effective in coping with it.

Behavior designed to cope with inflation may involve actions (such as anticipatory pricing) that exacerbate the problem, so that the degree to which establishments cope may be indicative of future changes in the inflation rate. Four broad categories of coping behavior were studied: inventory stockpiling, pricing, borrowing, and personnel changes. The percent of establishments of different industrial types and sizes that attempted to cope in any of these ways is shown in Table 1. The most commonly used mechanism for coping with inflation was adjusting employment (70 percent) followed by credit modifications and price increases (both at 60 percent) and inventory stockpiling (20 percent).

Employment Modifications

Adjusting the level and composition of an establishment's work forces was the most frequently used coping mechanism. Coping techniques tended to differ among sectors. Wholesalers, unlike either manufacturers of retailers, were more likely to increase part-time employment than to reduce it. Manufacturers (and large establishments of all types) were much more likely to modify their full-time employment rolls than were wholesalers or retailers; retailers and manufacturers were more likely than wholesalers to reduce overtime. With regard to overtime it is interesting to note the marked preference for reduction by all three sectors.

Logic would argue that one way inflation influences the desired level of employment is through actual and anticipated changes in the level of business activity. Indeed, the attempt to increase employment is more prevalent among establishments that have experienced rising sales volume due to inflation than among those which have not. Correspondingly, the attempt to decrease employment is concentrated among establishments that have not been helped by increasing sales volume.

Another aspect of inflation's influence on the desired level of employment is by way of changes in profit per unit of output or sales. Planned employment increases are twice as likely in establishments whose prices have increased relative to costs than they are in establishments whose prices have not increased relative to costs. And planned employment decreases are half again as likely in establishments that have not had price increases relative to costs.

It may be somewhat surprising that 44 percent of establishments planning to increase employment experienced neither increased sales volume nor increased profit per unit of sales in the six months prior to the survey, and only 20 percent of them experienced both. But this is fully in keeping with the generally-accepted idea that firms do not hire and fire with short-run fluctuations in activity, but, rather, base their employment decisions on longer-run considerations. The employment-profit-sales data may simply indicate that firms' expectations for the future differ markedly from their experiences of the recent past.

This idea is corroborated when we consider desired employment changes in relation to managers' responses to queries about their expected ability to cope in the next few years given continued inflation. Approximately 50 percent of business establishments felt they would be less able to cope with continuing inflation over the next few years, and

Table 1. BUSINESS REACTIONS TO INFLATION, 1979

Ways in Which Business Establishments Coped with Inflation	All Establishments	Manufacturers	Wholesalers	Retailers	Small Establishments	Medium Establishments	Large Establishments
Inventory Stockpiling	**21%**	**27%**	**26%**	**18%**	**20%**	**24%**	**13%**
Accumulation of:							
Raw Materials	11	20	10	8	9	15	9
Finished Goods	16	12	23	15	16	17	9
Pricing	**60**	**72**	**58**	**58**	**57**	**71**	**53**
Increasing prices in anticipation of cost increases	30	44	22	30	30	32	29
Passing on cost increases more rapidly	50	59	52	47	46	61	53
Borrowing	**61**	**61**	**45**	**66**	**57**	**72**	**61**
Reducing:							
Short-Term	46	49	43	47	44	54	50
Long-Term	54	47	45	58	56	50	42
Increasing:							
Short-Term	8	6	4	9	5	15	6
Long-Term	9	12	7	9	7	13	21
Employment Modifications	**70**	**84**	**64**	**69**	**66**	**81**	**92**
Reducing:							
Full-Time	20	30	13	19	17	25	44
Part-Time	27	29	13	31	29	23	31
Overtime	50	54	40	52	45	63	70
Increasing:							
Full-Time	20	29	14	19	19	22	20
Part-Time	19	17	22	18	19	18	25
Overtime	4	14	5	1	3	6	5

Note: Tabulations are based on 928 cases.

this expected loss of ability was particularly pronounced for small establishments. But of the 8 percent of establishments whose managers thought they would be better able to cope, 50 percent planned to increase employment. This is more than twice as large a percentage as that of establishments expecting to be equally able to cope and almost three times as large as that of establishments expecting to be less able to cope. Conversely, over one-third of establishments expecting to be less able to cope with inflation planned to decrease employment, while only one-tenth of those expecting to be better able to cope planned to decrease employment.

BUSINESS FIRMS' RELATIVE ABILITY TO COPE IF INFLATION CONTINUES FOR NEXT FEW YEARS

Type of Establishment	Less Able	Equally Able	Better Able
Manufacturers	41%	48%	10%
Wholesalers	63	28	8
Retailers	47	44	8
Small Estab.	52	40	8
Medium Estab.	40	46	12
Large Estab.	46	46	7
All Estab.	49	42	8

Note: Table does not show the small proportion replying "don't know."

Borrowing

More than half of all establishments were attempting to reduce borrowing whereas less than one-tenth were attempting to increase it. This is not surprising since over 60 percent of establishments thought that interest rates were high, even considering inflation.

Sixty percent of all establishments attempted to cope with inflation by changing their borrowing patterns. Wholesalers were much less likely than retailers or manufacturers to attempt to modify their credit in any way. Retailers differed from other sectors in one respect: many more of them atttempted to reduce long-term borrowing. Large establishments also differed with respect to credit manipulations: many more of them attempted to increase long-term borrowing and many fewer attempted to reduce it.

Pricing

Almost one-third of all establishments reported engaging in anticipatory pricing, which may help explain the rapid acceleration of inflation that has occured since the

data were collected. Indeed, during the first half of 1979 anticipatory pricing was most prevalent among manufacturers, the first link in the production-distribution chain. This behavior may well have become more prevalent in the distribution sectors since then. Half of all establishments reported passing on cost increases more rapidly, with this behavior most noticeable among manufacturers and medium-size establishments. Although more rapid cost pass-throughs do not augur as poorly for future inflation as anticipatory pricing, their affects can be significant.

Inventory Stockpiling

Fully one-fifth of manufacturing and sales establishments attempted to accumulate inventories in anticipation of rising costs. One would expect that this is lower than it would have been had credit been easier. The fact that *real* interest rates at this time may have actually been low is irrelevant in light of these respondents' perceptions that interest rates were high.

Differences between sectors of the economy relative to inventory stockpiling were large, with over a quarter of manufactureres and wholesalers having engaged in this kind of coping behavior as compared to only 18 percent of retailers. There was less of a tendency for large companies to cope in this manner.

CONSUMERS

Consumers can react to inflation-pinched budgets by increasing household income, through increased labor force participation for example, or by changing how they spend their income, including how much they save or take on debt. Although the rise of dual-earner households has been an important coping response to inflation, this short report focuses only on consumer reactions to inflation which center on spending and saving decisions, not on how households have attempted to increase their income.

How successful have consumers been in coping with inflation? In the summer of 1979, the majority (60 percent) of respondents reported that their families had managed to stay even or had gotten ahead of inflation. Despite the frequent and often bitter complaints about inflation by the majority, only a minority, although substantial, actually felt that they were financially hurt by inflation. The majority were apparently able to cope with inflation with some success.

Two-thirds of upper income families reported that they had stayed even or ahead of inflation, compared with about half of lower income families. As shown in Table 2, respondents under age 25 were more likely to report staying even or getting ahead of inflation, with no significant differences among those 25 or older. Interestingly, college-educated respondents were less likely to report staying even or ahead of inflation (53 percent) as compared with those with less than a high school education (63 percent). Although income and education are closely associated, these variables demonstrated opposite relationships to perceptions of being hurt by inflation, and indicate greater perceived hardship among those with relatively high education and those with low incomes.

Saving and Debt

Spending decisions have also been affected by attitudes toward saving and debt. The appeal of savings and the

Table 2. CONSUMER REACTIONS TO INFLATION, 1979

Demographic Characteristics	Family Stayed Even or Ahead of Inflation	Increase in Prices Has Caused...			In Times of Rapid Inflation...		
		Change in Shopping Behavior	More Shopping for Lower Prices	Reduced Purchase of Items With Large Price Increases	Favor Advance Buying	Bad Idea to Save	Better to Borrow
All Families	60%	71%	47%	69%	25%	24%	14%
Family Income							
Less than $10,000	53	79	49	76	23	18	9
$10,000-14,999	52	77	50	78	29	16	7
$15,000-19,999	55	72	42	74	27	23	11
$20,000-24,999	67	69	48	61	24	27	19
$25,000 or more	69	63	46	61	23	36	24
Age of Respondent							
Younger than 25	73	74	50	72	32	25	15
25-44	57	72	51	70	26	28	19
45-64	61	71	44	72	23	24	12
65 or older	61	69	41	62	21	11	7
Education of Respondent							
Grades 1-11	63	74	44	75	23	10	6
High School Graduate	59	79	51	75	26	19	9
Some college	65	69	45	67	24	28	16
College graduate	53	59	44	60	25	40	28

Note: Tabulations are based on 2131 cases.

distaste for debt have been significantly affected by the inflationary environment. Among all families, 24 percent felt it was a bad idea to save as much as possible during times of rapid inflation, and 14 percent of all families felt it was better to borrow as much as possible in times of inflation. Attitudes toward saving and debt varied significantly among demographic subgroups. The appeal of saving and the avoidance of debt was highest among elderly, low education, and low income families. In contrast, high income families and college educated respondents, subgroups responsible for a large share of aggregate saving and debt, were most likely to express the opinion that it was better to borrow and a bad idea to save in times of rapid inflation. Among families with incomes of $25,000 of more, one-third reported it was a bad idea to save as much as possible with rapid inflation, and one-fourth reported it was better to borrow as much as possible in times of inflation.

Price Comparisons

Rapid inflation has heightened comparative price shopping behavior on the part of consumers. More than two-in-three consumers reported inflation had changed the way they shop, and half reported that they now more frequently shop around for a low price. More frequent comparative price shopping was reported by a near majority throughout most major population subgroups (see Table 2).

Although comparative shopping enables consumers to make better spending decisions, this reaction alone cannot offset the impact of general and sustained price increases. The classic coping mechanism is for consumer spending decisions to change in response to relative price changes. Higher gasoline prices, for example, can be accomodated within a fixed income by decreased gasoline consumption or by decreased consumption of other goods and services. To the extent that consumers cut down or stop buying items which have had particularly large price increases, they can cope with inflation by shifts in spending patterns. As shown in Table 2, this shift represented a widespread and pervasive coping response, as more than two-thirds of all families reported that they had cut down or stopped buying items which have had particularly large price increases. High income families somewhat less frequently reported this coping response than low income families (61 vs. 76 percent), reflecting greater discretionary income and more frequent income increases. The elderly, those over age 65, were less likely to report changed spending habits, reflecting in part more limited discretion in their budgets. College educated respondents were the least likely to report coping with inflation by reduced purchases (60 percent), while those with less than a high school education were the most likely to report this response (75 percent).

Advance Buying

Consumers also reacted to inflation by increasing purchases in anticipation of future price increases, rather than by decreasing purchases. Advance buying as a means to cope with inflation was viewed with favor by 25 percent of all families in September 1979. This favorable view toward advance buying was widely shared among all income and education subgroups. Advance buying was viewed with more favor by the young, with nearly one-third of those under age 25 favoring advance buying, in comparison with one-fifth among those over age 65.

Drug Use Among American Youth, 1975-79

Patrick M. O'Malley, Lloyd D. Johnston, and Jerald G. Bachman
Survey Research Center
The University of Michigan

Exactly five years ago, *Economic Outlook USA* published a report based on the first data collection by the Monitoring the Future project. In this report, we present findings from the first five years of the project, covering the period from 1975 through 1979.[1]

Monitoring the Future – An Annual Survey of Youth

Each year since 1975, Monitoring the Future has surveyed approximately 17,000 seniors located in 130 high schools throughout the U.S. Each year's sample is drawn to be nationally representative of seniors in both public and private high schools. In the surveys, which are sponsored by the National Institute on Drug Abuse, students are asked about their own use of various drugs, licit and illicit, their attitudes and beliefs about these drugs, and a great variety of other questions dealing with more general values, attitudes, behaviors, and lifestyles.

Earlier Findings

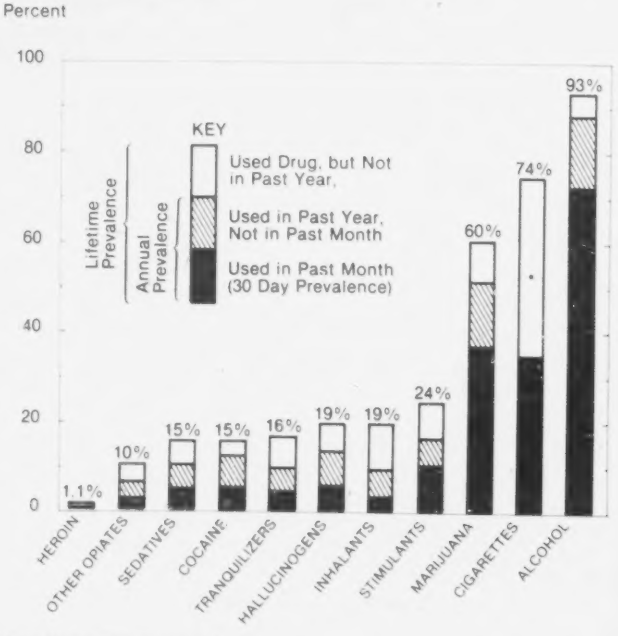
The earlier report compared national drug use rates by high school seniors as of 1975 with rates reported in a previous study which had been conducted in 1969. The data showed a substantial rise in the use of several illicit drugs, particularly marijuana, between 1969 and 1975. The authors also pointed to figures which indicated that alcohol use constituted a serious drug abuse problem for many young people of high school age. On the brighter side, there was considerable conservatism expressed about the use of illicit drugs other than marijuana.[2] Data collected during the last 5 years reveal changes in the patterns of drug use which have developed since the 1975 report.

Prevalence

Chart 1 presents the data on prevalence and recency of use of 11 classes of drugs for the high school class of 1979. Data are shown for lifetime use, use during the past year, and use during the past month. Clearly, the most popular drugs are alcohol, cigarettes, and marijuana. Nearly everyone has tried alcohol (93 percent), three-quarters have smoked a cigarette, and the majority have tried marijuana (60 percent). There is a sharp drop down to the next most popular drug class, stimulants, which have been tried by about one student in four (24 percent). Prevalence rates for the other illicit drugs range from 19 percent (inhalants and hallucinogens) to 10 percent (opiates other than heroin), except for heroin, which has been tried by only about one in 100 students.

Use in the past month parallels lifetime prevalence (at a lower level, of course), with a few interesting exceptions. Less than one-half of those who had ever smoked a cigarette had done so in the past month, but considerably more than half of the marijuana users had done so. As a result, more seniors had smoked some marijuana in the past month than had smoked tobacco (37 percent vs. 34 percent). Recent use of inhalants is relatively low, because much of the use of inhalants occurs at younger ages and is discontinued prior to senior year. Tranquilizers also show a relatively low rate of recent use. Cocaine, on the other hand, shows a relatively high rate of recent use, presumably because this drug has been increasing in popularity during the last few years.

Chart 1. PREVALENCE AND RECENCY OF USE, ELEVEN TYPES OF DRUGS, CLASS OF 1979



*Annual use not measured.

[1] A more detailed report of the results of these surveys appears in *Drugs and the Nation's High School Students: Five Year National Trends, 1979 Highlights.* This report can be ordered without cost from the National Clearinghouse for Drug Abuse Information, National Institute on Drug Abuse, 5600 Fishers Lane, Rockville, MD 20857.

[2] J.G. Bachman and L.D. Johnston, "Drug Use Among American Youth," *Economic Outlook USA* 3, Spring 1976: 32-33.

Trends in Use for Males and Females

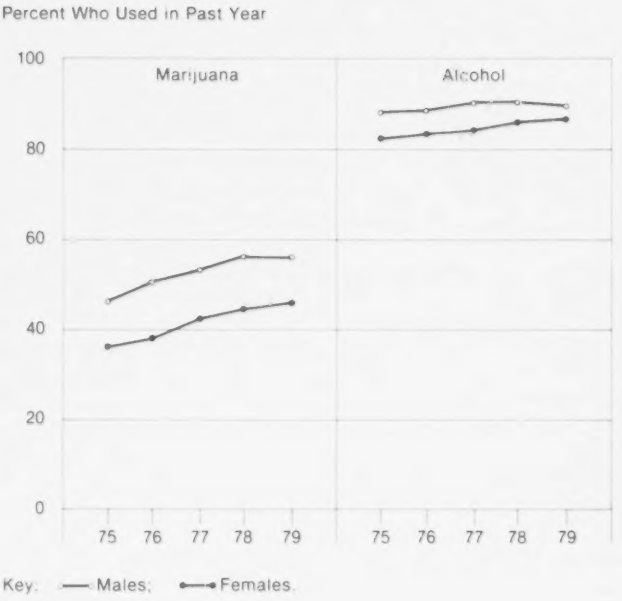
Chart 2 shows trends from 1975 to 1979 in annual prevalence of eight illicit drugs, separately for males and females. Except for tranquilizers and stimulants, annual use of these drugs by males has been and continues to be higher than use by females. Trend lines for use of heroin and opiates other than heroin are essentially flat. Inhalants, cocaine, and stimulants show rises in annual use rates. The rise in cocaine use is particularly dramatic, with overall annual prevalence going from 5.6 percent in 1975 to 12.0 percent in 1979. Use of hallucinogens, after a drop between 1975 and 1979, shows a slight regaining of popularity. Finally, use of sedatives and tranquilizers is generally declining.

Most of these trends have been occurring about equally among males and females. A major exception is in the use of tranquilizers. Since 1977, use of tranquilizers by males (who at that time were less likely than females to have used them) has remained essentially constant; but use by females has been declining and reached a level lower than that for males in 1979.

In Chart 3 the trends for annual use of marijuana and alcohol are presented. Note that Chart 3 uses a different scale than Chart 2. Annual prevalence of marijuana increased steadily and substantially between 1975 and 1978 for both males and females; from 1978 to 1979, however, there has been a distinct slowing of this increase, with use by males actually having remained steady. Alcohol use by females shows a very slight upward shift.

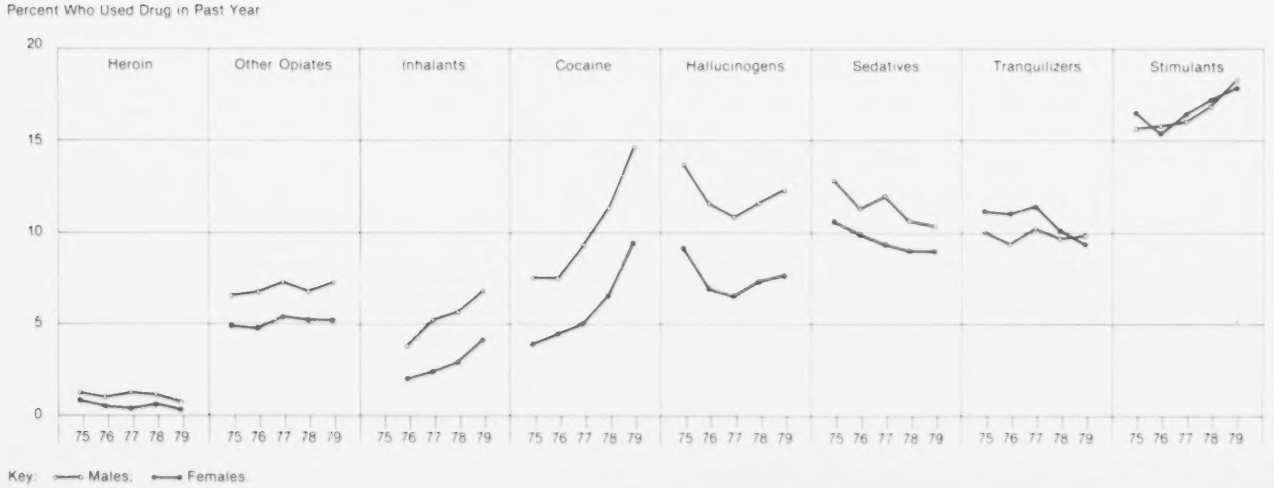
While these annual rates are certainly important indicators, frequency of drug use may be even more important. We have found a particularly useful indicator of frequent use to be the use of a drug class on 20 or more occasions during the past 30 days, which we refer to as "daily or near-daily" use. Most illicit drugs show extremely low percentages of seniors reporting use at this frequency; less than one percent report daily use of any of the illicit drugs except marijuana.

Chart 3. TRENDS IN ANNUAL PREVALENCE OF MARIJUANA AND ALCOHOL, 1975-79, BY SEX



A particularly important finding, shown in Chart 4, is that the alarming increase seen between 1975 and 1978 in rate of daily or near-daily use of marijuana seems to have halted between 1978 and 1979. The percentage of males who reported daily use had gone up from 8.1 percent in 1975 to 14.2 percent in 1978, but the figure dropped to 12.7 percent in 1979. Females' use at this high frequency had also increased though not so sharply (4.0 percent in 1975 to 7.1 percent in 1978); they show only a slight increase to 7.3 percent in 1979.

Chart 2. TRENDS IN ANNUAL PREVALENCE OF EIGHT ILLICIT DRUGS, 1975-79, BY SEX



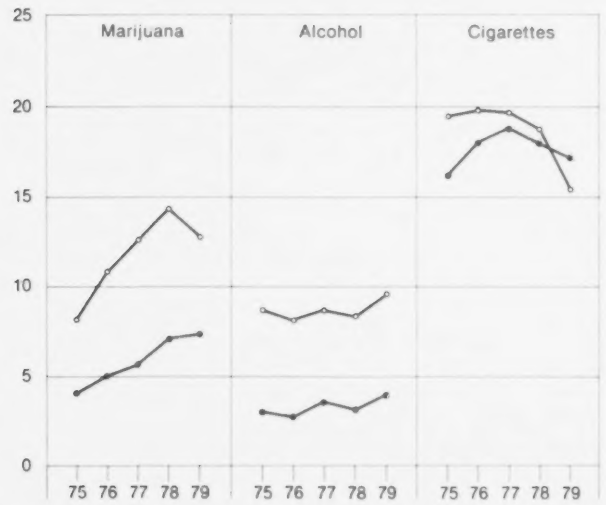
Regular cigarette smoking (one-half pack or more per day) is distinctly higher than daily use of either marijuana or alcohol, and some very interesting trends have been developing. From 1975 to 1977, females' smoking had increased, virtually equalling males' smoking rates, which traditionally had been higher. Since 1977, both sexes have shown a decline in prevalence, but use among males appears to be declining faster. Thus, for the first time, more females than males are regular cigarette smokers (17.1 percent vs. 15.4 percent).

Daily use of alcohol had been essentially constant between 1975 and 1978 for both sexes, but both showed some increase in 1979. It remains the case that daily use of marijuana is more common in this age group than daily use of alcohol.

It would be misleading to leave the impression that, because daily use of alcohol is relatively low, there is little cause for concern about alcohol use by seniors. On the contrary, we find that "binge" drinking is quite common, and increasingly so. We asked respondents to think back over the previous two weeks, and tell us how many times that had had five or more drinks in a row. More than half of the males (52 percent) and nearly one-third of the females (31 percent) reported such heavy drinking on at least one occasion. These figures are up slightly from 1975, when 49 percent of the males and 26 percent of the females reported such use. Furthermore, the percentage of seniors who say that most or all of their friends get drunk at least once a week has increased from 27 percent in 1976 to 35 percent in 1979. Thus, about one-third of seniors now report that most or all of their friends get drunk at least once a week. (In 1979, the figure for males was 37 percent; for females, 28 percent.)

Chart 4. TRENDS IN 30-DAY PREVALENCE OF DAILY USE OF MARIJUANA, ALCOHOL, AND CIGARETTES, 1975-79, BY SEX

Percent Using Daily



Key: Males; Females.

Note: Daily use for alcohol and marijuana is defined as use on 20 or more occasions in the past thirty days. Daily use of cigarettes is defined as smoking a half-pack or more per day in the past thirty days.

Attitudes and Beliefs

Along with actual behaviors, Monitoring the Future has been surveying attitudes and beliefs about drug use. First, it should be made clear that the great majority of seniors have been and continue to be generally quite conservative in their attitudes and beliefs about the use of illicit drugs. Except for marijuana, regular use of any of the illicit drugs is seen as entailing "great risk" of harm for the user. The percentages perceiving great risk in regular use range between 70 and 90 percent for all drugs other than marijuana. Regular use of marijuana is judged to involve great risk by considerably fewer — 42 percent. This latter figure increased from 35 percent in 1978, a shift which coincides with the halt in the rise in daily use. This coincidence suggests a possible reason for the halt: seniors are beginning to perceive greater risk associated with regular use, perhaps because of the increased attention given by the media and government officials to the potential hazards.

In addition to perceiving considerable risk of harm, seniors are generally very disapproving of drug use. Regular use of any illicit drug except marijuana is disapproved by the overwhelming majority (at least 90 percent); even for marijuana, regular use is disapproved by about two-thirds (69 percent). Just about the same proportion — two-thirds — disapprove of smoking a pack or more of cigarettes per day, or drinking alcohol at the rate of one or two drinks per day.

As would be expected, disapproval rates are lower for experimental or occasional use. Of all the illicit drugs, experimenting with marijuana is by far the least disapproved; still, one in three seniors (34 percent) disapproves of even trying it. Thus, while marijuana is sometimes thought to be universally accepted among high school seniors, there is in fact a very significant minority who remain opposed to any marijuana use at all.

There has been rather little in the way of major changes in the last several years in attitudes and beliefs. There are two exceptions: cocaine disapproval is down somewhat, and disapproval of regular cigarette smoking has been steadily increasing.

Outlook for the Future

Based on the annual surveys conducted since 1975, there appear to be both bad news and good news in the outlook for drug use in the 1980s. Perhaps the best news is that regular cigarette smoking seems to have peaked around 1977 and may be on a downturn. Female teenagers have indeed "come a long way," so that now more of them are regular smokers than males; but even their use rates seem to have peaked. Also in the category of good news is the fact that there continues to be a great deal of conservatism about the use of illicit drugs, especially drugs other than marijuana. With respect to marijuana use, the leveling off of what had been sharply rising trend lines, particularly for use at the near-daily level, will come as good news to most.

On the negative side, cocaine use has increased sharply and shows no signs yet of a downturn. Also distressing is the high level of "binge" drinking. And, in fact, all illicit drugs show levels of use which, while not nearly as high as marujuana and not showing any major increases, are nevertheless considerably higher than most adults would prefer to see.

One very interesting thing to be watching in the 1980s and beyond is what happens to behaviors, attitudes, and beliefs about illicit drugs on the part of those who have recently entered adulthood. As the children of the 1960s and 1970s become adults – and parents – in the 1980s, will they adopt the even more conservative views of the older generations, or will they retain their own less conservative views, especially with respect to marijuana? One factor which is sure to have a major impact will be the results of new research on the consequences of marijuana use. Extrapolating from recent trends in cigarette use and related attitudes, it seems likely that firm data on hazards associated with marijuana will result in more conservative views – on the part of new senior classes as well as those who graduated in the 1960s and 1970s.

MQEM Forecast – April 1980 Revision

The latest revision of the Michigan Quarterly Econometric Model (MQEM) forecast was released in early April by University of Michigan economists Saul Hymans, Harold Shapiro, and Joan Crary. The April forecast – undertaken to incorporate President Carter's new anti-inflation program – was in fact a modification of one released in early March, which foresaw a protracted period of slow but positive real economic growth through mid-1981. This contrasted with the November 1979 forecast – reported in the previous issue of this journal – of a mild recession in 1980, with 3 of 4 quarters having GNP declines.

Highlights of the April 1980 forecast follow, in the economists' words.

The Administration's program of credit controls and tighter fiscal policy turns our March forecast of a near-recession economy into a true recession of about a year in length. We are projecting four quarters of declining output from 1980:2 through 1981:1, with the sharpest rate of decline of real GNP in 1980:2 (3¼ percent at annual rate) followed by more modest rates of decline during the next three quarters (all slightly less than one percent at annual rate). As a result the unemployment rate is projected to be about 7½ percent by the end of 1980 and close to 8½ percent by the fall of 1981.

Sectors of the economy exhibiting weakness include those areas which appeared weak in our March forecast – homebuilding activity, business fixed investment, and consumer purchases of durable goods. Consumer purchases of durable goods appear even weaker than in March, in part as a result of the imposition of credit controls. In addition, however, car sales weaken in response to the recession and higher gas prices. Car sales dip below a 9 million unit rate by mid-1980 and stay below that rate until spring of 1981. Other areas of consumer spending also exhibit weakness as a result of the credit controls and the feedback effects of the recession.

Our assumptions regarding federal expenditures in conjunction with the federal revenue projections contained in the forecast do not yield anything like a balanced budget for fiscal '81, although some progress is made toward that goal. In the absence of any budget cuts and the fee on imported oil, we would project a deficit of $50 billion for FY '81. With the budget cuts and increased revenues from the oil import fee, we project a deficit of $35 billion. If we had not assumed a rollback of the scheduled increase in social security taxes in 1981, our projected budget deficit would have been closer to $22 billion.

Prices, as measured by the nonfarm business deflator, are forecast to rise 9.1 percent from 1979:4 to 1980:4 and at a 7.9 percent annual rate during the three quarters from 1980:4 to 1981:3. These projections are in fact somewhat higher than would have been the case in the absence of the Administration's program. The combination of credit controls and budget cuts, by slowing the economy down, causes declines in productivity which initially offset the deflationary pressures of lower aggregate demand by raising unit labor costs. Only in the final quarter of the forecast does the slowdown in the demand for goods and services begin to dominate price determination in the model.

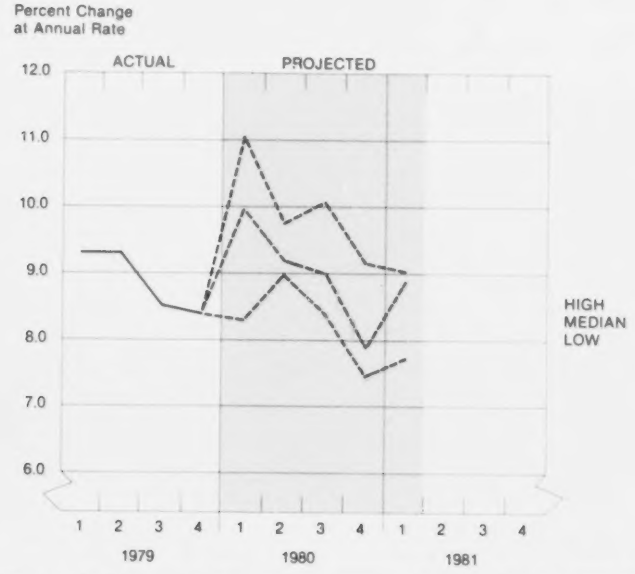
While the Administration's program does not succeed in reducing the rate of inflation over the range of our forecast, the behavior of prices in the latter quarters of the forecast clearly indicates that, over a longer horizon beginning after mid-1981, the program would indeed produce some decline in inflation.

1980:1 GNP Statistics

As OUTLOOK went to press, preliminary first quarter 1980 GNP statistics were released by the Commerce Department. New values for the series displayed in the GNP accounts section of our Data Appendix table (p. 44) follow:

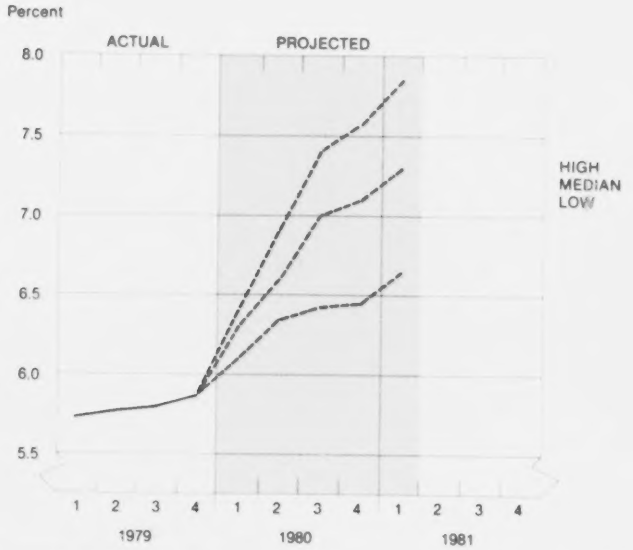
Gross National Product	2520
Personal Consumption Expenditures	1634
Durable Goods	221.8
Nondurable Goods	653.0
Services	759.4
Gross Private Domestic Investment	388.8
Nonresidential	271.6
Residential Structures	112.7
Change in Bus. Inventories	4.5
Net Exports	-21.0
Government Purchases	518.3
Disposable Personal Income	1737
Personal Saving Rate	3.4

GNP IMPLICIT PRICE DEFLATOR



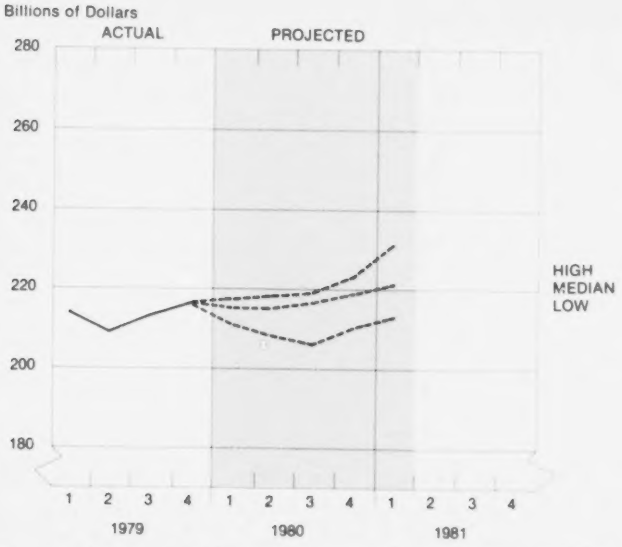
Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

UNEMPLOYMENT RATE



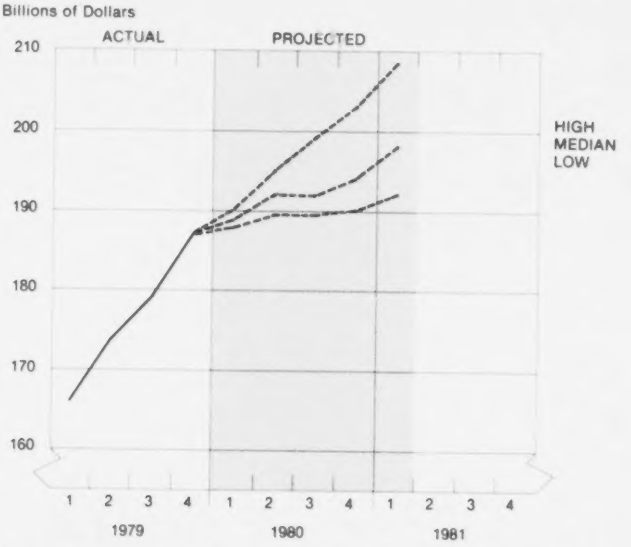
Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

CONSUMER DURABLE OUTLAYS



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

BUSINESS CAPITAL OUTLAYS



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

Actual and Projected Economic Indicators

seasonally adjusted

SERIES FORECAST BY THE ASA-NBER PANEL															
ECONOMIC INDICATOR	Quarterly Data												Annual Data		
	Actual							Projected					Actual		Proj.
	1978:2	1978:3	1978:4	1979:1	1979:2	1979:3	1979:4	1980:1	1980:2	1980:3	1980:4	1981:1	1978	1979	1980
GROSS NATIONAL PRODUCT	2104	2160	2235	2292	2330	2397	2457	2515	2551	2599	2665	2737	2128	2369	2582
GNP IMPLICIT PRICE DEFLATOR (index, 1972 = 100)	150.8	153.5	156.7	160.2	163.8	167.2	170.6	174.8	178.6	182.5	186.0	190.0	152.0	165.5	180.5
GNP IN CONSTANT DOLLARS (billions 1972 $)	1395	1407	1427	1431	1422	1433	1440	1440	1430	1427	1431	1438	1399	1432	1432
INDUSTRIAL PRODUCTION (index, 1967 = 100)	145.1	147.9	150.7	152.2	151.9	152.3	152.2	151.2	150.0	147.3	148.5	150.0	146.1	152.1	149.3
UNEMPLOYMENT RATE (quarterly measure, percent)	6.03	6.00	5.80	5.73	5.77	5.80	5.87	6.3	6.6	7.0	7.1	7.2	6.02	5.79	6.75
CORPORATE PROFITS AFTER TAXES	122.4	124.6	132.3	142.0	139.3	148.3	148.8	148.0	142.0	139.0	140.0	143.0	121.5	144.6	142.3
EXPENDITURES FOR NEW PLANT and EQUIPMENT	150.8	155.4	164.0	165.9	173.5	179.3	186.9	189.0	192.0	192.0	194.0	198.0	153.6	176.4	191.8
NEW PRIVATE HOUSING UNITS STARTED (millions)	2.097	2.029	2.055	1.665	1.820	1.809	1.593	1.40	1.32	1.32	1.40	1.50	2.009	1.722	1.36
CHANGE IN BUSINESS INVENTORIES	25.8	20.0	20.6	19.1	33.4	14.5	5.6	10.0	8.2	5.0	8.0	10.5	22.3	18.15	7.8
CONSUMER DURABLE EXPENDITURES	200.3	203.5	212.1	213.8	208.7	213.4	216.2	215.0	215.0	216.5	218.5	221.0	200.3	213.0	216.3
NATIONAL DEFENSE PURCHASES	98.2	99.0	101.2	103.4	106.0	109.0	114.6	118.0	120.0	124.0	129.5	133.0	99.0	108.3	122.9

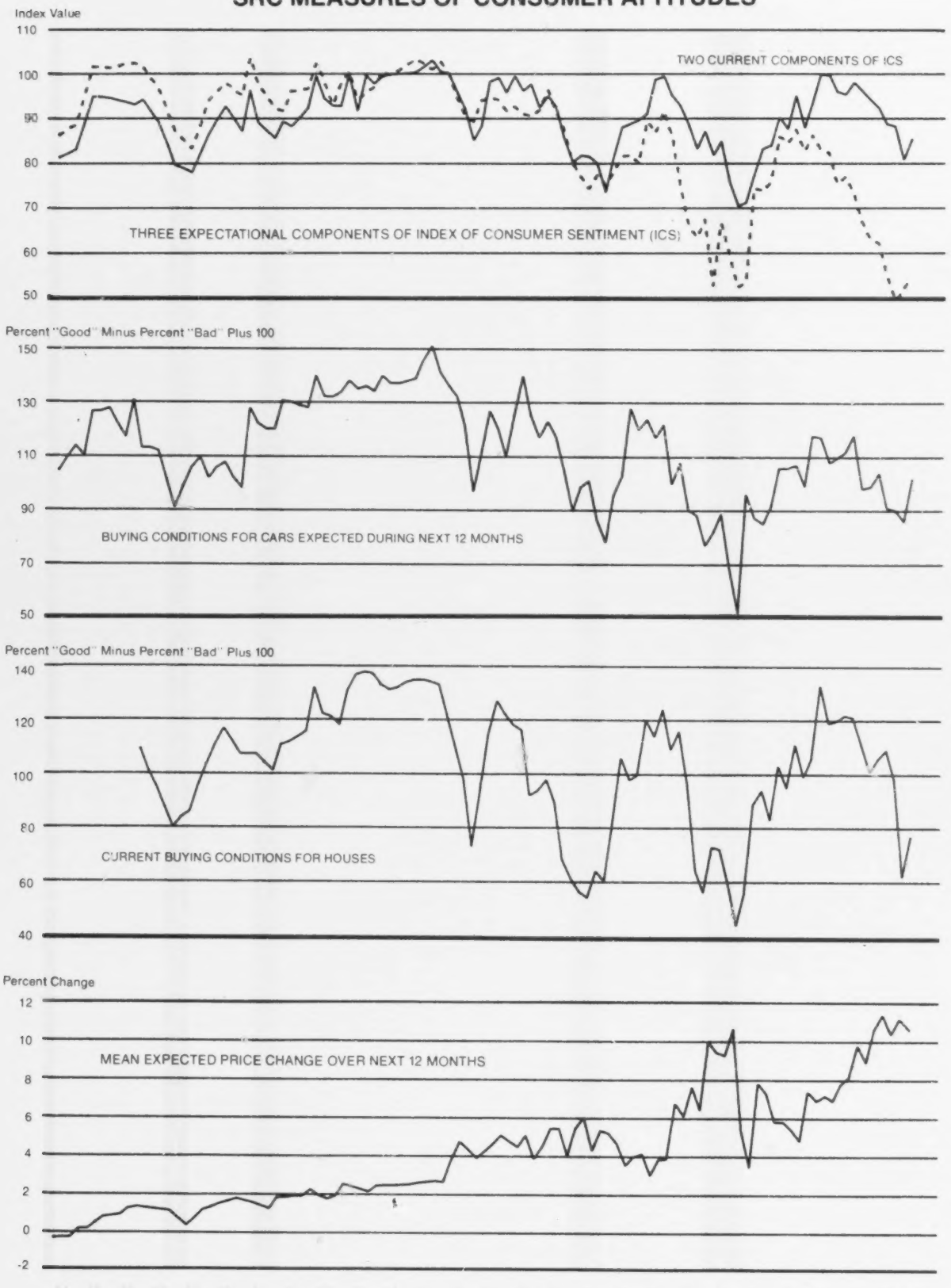
SERIES FROM THE GROSS NATIONAL PRODUCT ACCOUNTS															
ECONOMIC INDICATOR	Quarterly Data												Annual Data		
	1977:1	1977:2	1977:3	1977:4	1978:1	1978:2	1978:3	1978:4	1979:1	1979:2	1979:3	1979:4	1977	1978	1979
GROSS NATIONAL PRODUCT	1820	1876	1931	1971	2011	2104	2160	2235	2292	2330	2397	2457	1900	2128	2369
PERSONAL CONSUMPTION EXPENDITURES	1169	1191	1221	1260	1287	1331	1369	1415	1454	1476	1529	1580	1210	1351	1510
DURABLE GOODS	174.3	175.7	178.9	186.4	185.3	200.3	203.5	212.1	213.8	208.7	213.4	216.2	178.8	200.3	213.0
NONDURABLE GOODS	467.7	475.5	483.0	499.2	505.9	521.8	536.7	558.1	571.1	581.2	604.7	630.7	481.4	530.6	596.9
SERVICES	527.1	539.3	558.7	574.1	596.0	609.1	629.1	645.1	669.3	686.0	710.6	733.5	549.8	619.8	699.9
GROSS PRIVATE DOMESTIC INVESTMENT	280.4	300.0	315.7	316.9	327.0	352.3	356.2	370.5	373.8	395.4	392.3	387.2	303.3	351.5	387.2
NONRESIDENTIAL	179.8	186.1	193.2	198.6	203.7	218.8	225.9	236.1	243.4	249.1	261.8	265.2	189.4	221.1	254.9
RESIDENTIAL STRUCTURES	81.3	91.4	95.0	99.9	100.5	107.7	110.2	113.7	111.2	112.9	116.0	116.4	91.9	108.0	114.1
CHANGE IN BUS. INVENTORIES	19.3	22.5	27.5	18.5	22.8	25.8	20.0	20.6	19.1	33.4	14.5	5.6	22.0	22.3	18.2
NET EXPORTS	-9.2	-6.0	-6.3	-18.1	-22.2	-7.6	-6.8	-4.5	4.0	-8.1	-2.3	-11.9	-9.9	-10.3	-4.6
GOVERNMENT PURCHASES	380.0	391.6	400.5	412.8	419.4	428.3	440.9	453.8	460.1	466.6	477.8	501.2	396.2	435.6	476.4
DISPOSABLE PERSONAL INCOME	1250	1286	1323	1361	1395	1437	1477	1525	1572	1602	1640	1683	1305	1458	1624
PERSONAL SAVING RATE (% of disposable income)	4.2	5.1	5.4	5.1	5.3	5.0	4.8	4.7	5.0	5.4	4.3	3.5	5.0	5.0	4.55

Note: All data are at annual rates and in billions of current dollars unless otherwise indicated.

Sources: Projections: American Statistical Association – National Bureau of Economic Research panel of forecasters. (Forecasts were released in February 1980.)

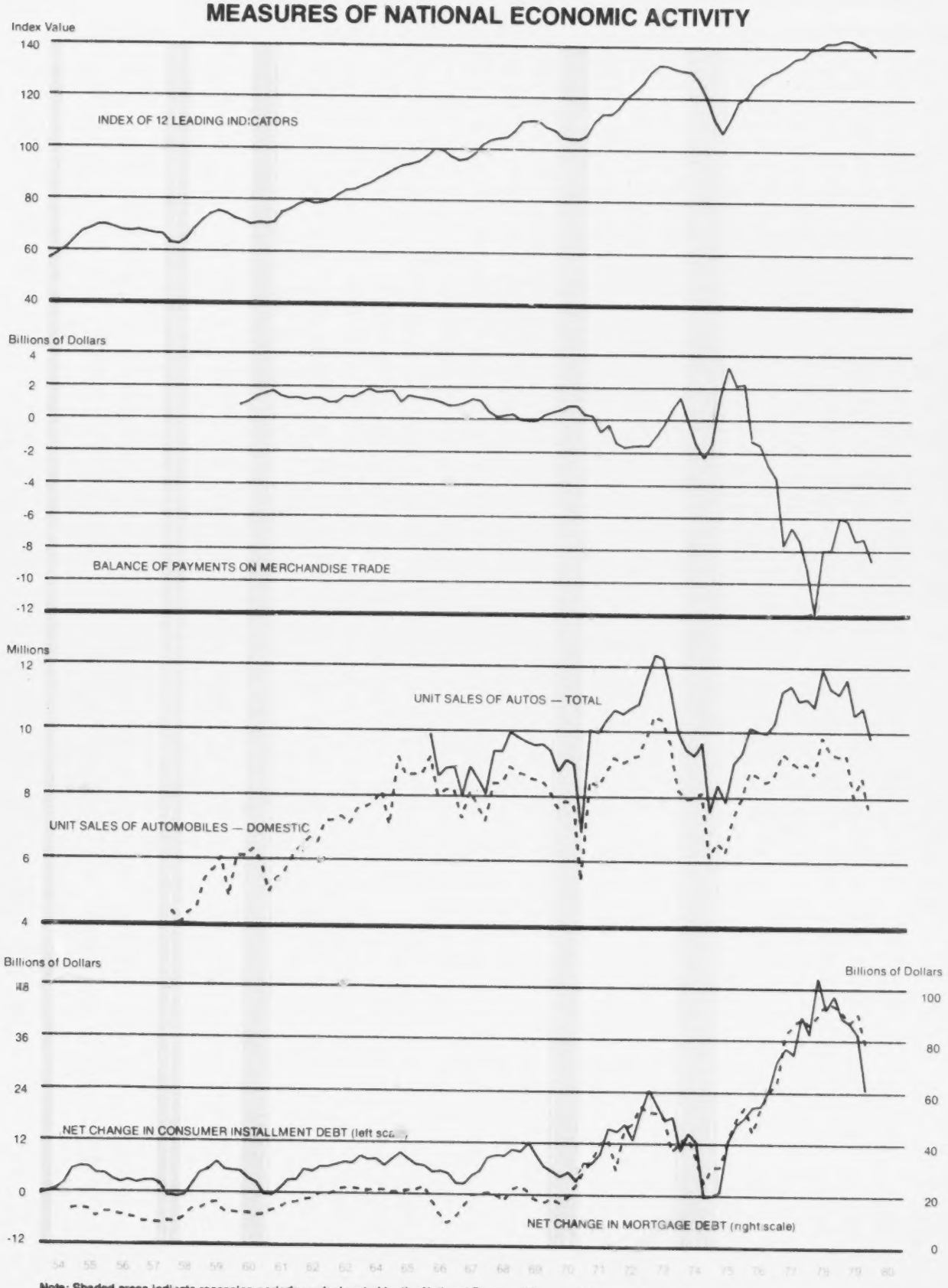
Actual Data: U.S. Departments of Commerce and Labor, Board of Governors of the Federal Reserve System.

SRC MEASURES OF CONSUMER ATTITUDES



Note: Shaded areas indicate recession periods as designated by the National Bureau of Economic Research, Inc.

MEASURES OF NATIONAL ECONOMIC ACTIVITY



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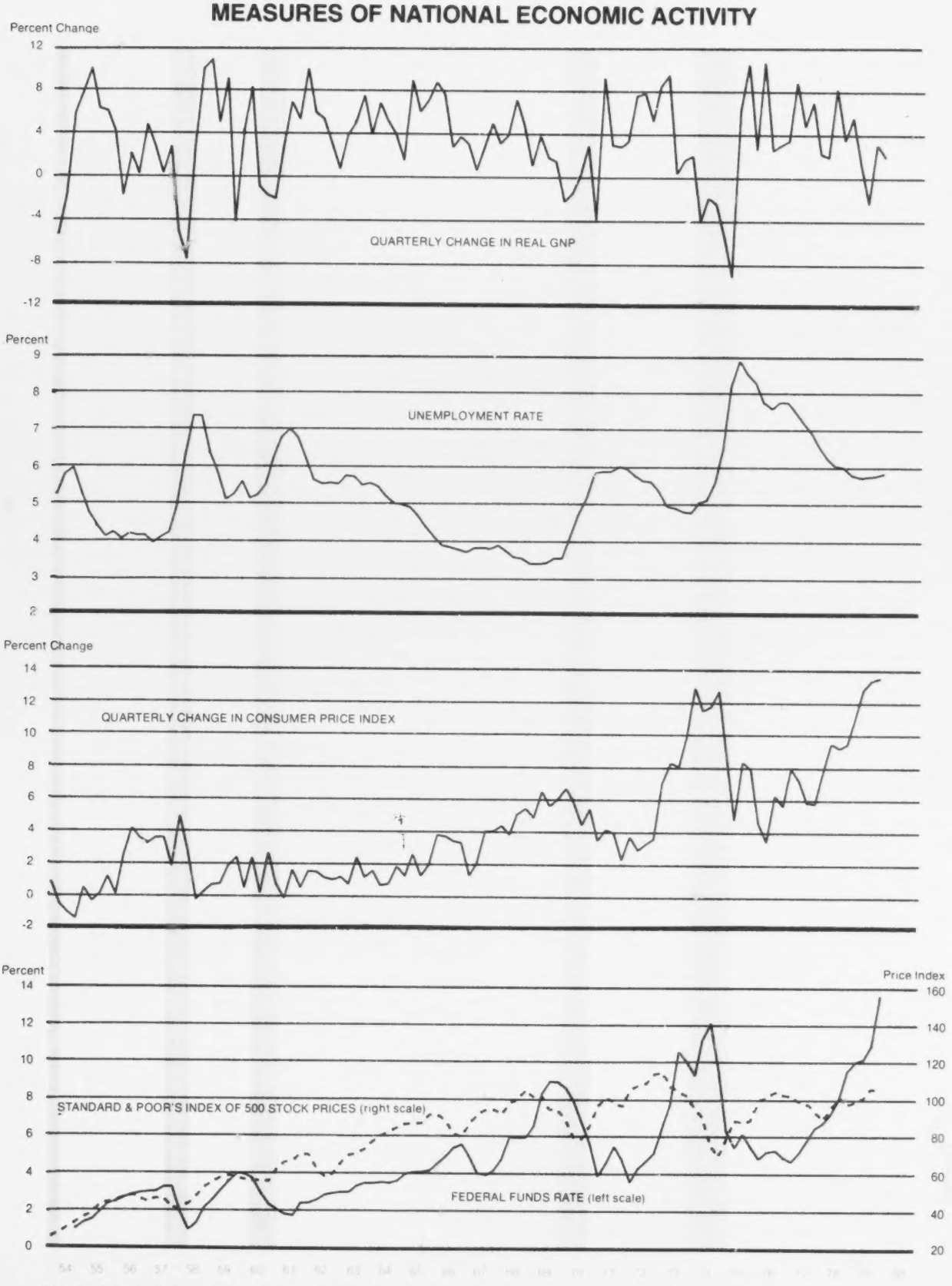
MEASURES OF NATIONAL ECONOMIC ACTIVITY



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SUMMER 1980
Vol. 7 No. 3

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Economic Policy: The Hair of the Dog
Raymond J. Saulnier
Monetary and Fiscal Discipline:
The Basics of Inflation Control
Richard T. Curtin
Consumer Confidence at Record Low
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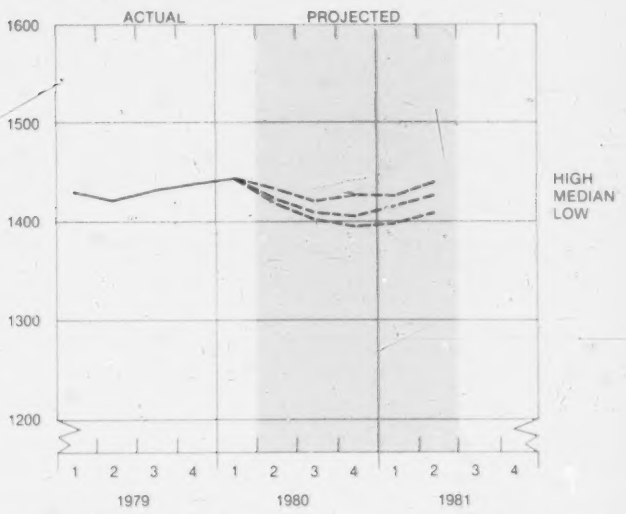
ECONOMIC PROSPECTS

Actual and projected; seasonally adjusted quarterly data at annual rates

GROSS NATIONAL PRODUCT

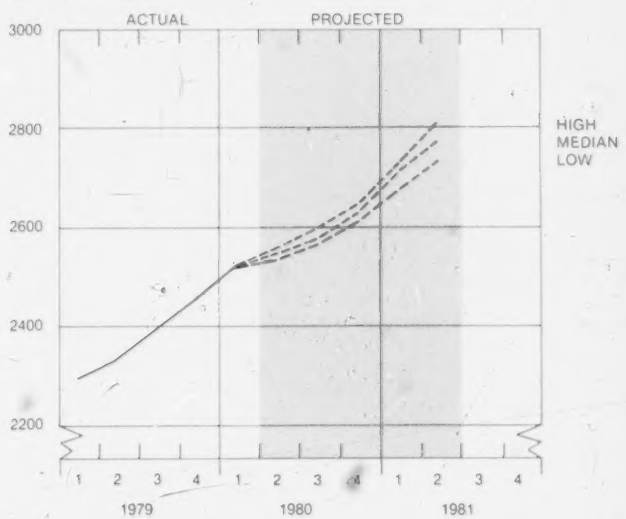
IN CONSTANT 1972 DOLLARS
Billions of Dollars



Sources. Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

GROSS NATIONAL PRODUCT

IN CURRENT DOLLARS
Billions of Dollars



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

Frequently Used Abbreviations:

ASA	American Statistical Association
BEA	Bureau of Economic Analysis, U.S. Department of Commerce
NBER	National Bureau of Economic Research
SRC	Survey Research Center
197*x:y*	*y*th quarter of 197*x*

Economic Policy: The Hair of the Dog

Murray L. Weidenbaum
Director, Center for the Study of American Business
Washington University

Rising unemployment amidst historically high rates of inflation have stirred renewed interest in incomes policies and other types of governmental intervention in the private economy (see, for example, the earnest pleas by Barry P. Bosworth and F. Thomas Juster in the Spring 1980 issue of ECONOMIC OUTLOOK USA).

It is easy enough to share the widespread frustration with the limited ability of traditional monetary and fiscal policy to bring down the general price level very quickly. But wage and price controls must surely represent an approach to economic policy that is reminiscent of the traditional hangover remedy: having a bit of the hair of the dog that bit you. After all, it is the rapid and pervasive expansion of government expenditures, government taxation, and government regulation that has eroded productivity, slowed down capital formation, retarded innovation, and fueled the inflationary forces which have become so deeply embedded in the American economy.

The Case for Less Government Intervention

If the previous articles were pleas for a further turn to the left in American policy-making, this article is intended to describe a possible opening on the right. The basic theme suggested here is that, if government policies are indeed the prime culprit for the current inflation, the sensible answer lies not in more, but in less, government interference in the economy. That is, appropriately restraining monetary and fiscal policy should be supplemented—but *not* by wage and price controls that subvert the market mechanism.

Rather, what is needed are actions to improve the functioning of the private business system. Instead of blithely continuing to increase the tax burden (via such moves as allowing inflation to rachet up the average taxpayer's income into higher brackets), tax rates should be reduced substantially—a move which will also increase voluntary private saving. Rather than constantly raising those transfer payments that erode the incentives to work and to save, the growth of government spending should be slowed, especially in the civilian programs. Rather than competing with the private sector for the limited supply of investment capital, government should sharply reduce the size of its deficits and the number of off-budget credit agencies, all of which are financed from the same pool of private saving. Each of these actions would reduce the pressures for government intervention in the economy.

Simultaneously, we need to move toward a more competitive economy in which labor and product markets would function more freely—and hence the desired adjustments to monetary and fiscal policy would be more rapid than is now the case. Although it is hardly novel for an economist to enter a plea on behalf of enhancing the role of competition in product and labor markets, we need to recognize that wage and price controls have been introduced by government because market imperfections have substantially weakened the ability of monetary and fiscal policy to achieve desired levels of economic growth and price stability. It is important to realize, however, that much of the departure from a freely functioning competitive economy results from government itself—from the plethora of efforts to deal with a host and variety of shortcomings in the society. Albeit well intended, so many of these government efforts to alleviate "market failure" have generated more than offsetting "government failure."

Specific Suggestions

To be sure, for government to follow this version of the age-old admonition, "Physician, Heal Thyself," will be neither simple nor easy. There are several routes that can be followed at the same time in pursuing the objective—expansion of conventional antitrust policy, reform of regulation, and reduction in the whole range of government subsidies.

In the antitrust area, one specific approach comes to mind—reducing the various statutory "immunities" from anti-trust prosecution. The Congress would do well to lift the exemptions from the competitive norm now extended to many product markets, such as interstate trucking, milk marketing, maritime activities, etc. Moreover, it may be time to think about the unthinkable—re-examining the broad immunity extended to most labor union activities, which in practice cover so many aspects of product as well as labor markets.

In the area of government regulation, we should refer to the expanding literature on the excessive costs of many regulatory activities ond on the available ways to reduce their negative impacts—such as benefit-cost tests, cost-effectiveness approaches, and regulatory budgeting. What is needed is a comprehensive and even-handed regulatory reform effort to require the agencies to seek out the least-cost approaches to the important social goals that they are designed to achieve. Such a shift in regulatory decision-making could improve the performance of government itself; it surely would enhance productivity and bring down the costs that are now imposed on the private sector. In view of the new regulatory burdens currently in the government's decision-making pipeline, the resultant lightening of the regulatory burdens on business would yield rising returns over an extended period of time.

The policy change would contribute simultaneously to bringing down both inflation and unemployment. Eliminating the Davis-Bacon Act, for example, would not force a choice between fighting unemployment or reducing inflation. Wiping the statute books clean of that vestige of the 1930s would simultaneously lower building costs and increase the demand for construction workers by ending Davis-Bacon's requirement that artificially high "prevailing" wages be paid those workers. The imposition of

general wage and price controls, in contrast, would not deal with this institutional problem.

Moreover, the current concern with reducing or at least slowing down the size of government could well focus on the various subsidies embedded in so many federal procurement, credit, and expenditure programs. These subsidies shelter numerous groups—ranging from shipbuilders to farmers—from market forces and make more difficult and expensive the access to products and markets by the rest of the population. The domestic prices of many products (food and steel being perhaps the most conspicuous examples) have been held artificially high by such government subsidies as production quotas and a variety of restrictions on imports.

Obstacles to Change

The obstacles to the changes envisioned here should not be underestimated. That the cost to the nation of each of these special provisions may exceed the benefits to the nation may not be the politically relevant criterion. The benefits to some particular group are likely to far outweigh the costs to them. Thus, a powerful clientele exists to opose the reduction of each special benefit. But perhaps the crucial point that needs to be stressed is that when the costs of all of these various special arrangements are aggregated, they outweigh the benefits, even to many of the specific groups of beneficiaries. That is, with so many segments of the population attempting to insulate themselves from competition, most of the efforts may be self-defeating. The dead weight of these interferences with economic progress and productivity may reduce the absolute size of the slices of the economic pie available to most groups in the society.

The Monetary-Fiscal Framework

Of course, these structural and institutional changes must be viewed only as supplements to appropriate monetary and fiscal policy. As we saw in 1972, one of the dangers of wage and price controls was their being used to cloak excessive expansion in credit and in government spending. Lest I be misunderstood, I am well aware of the power of monetary policy to influence the level of nominal income and I am a strong advocate of its use. As a sometime participant in the policy making process, however, I am also aware of the very powerful constraints that inhibit monetary policy decision makers. That is, continuation of a policy of monetary restraint—such as a stable growth of the money supply over a sustained period of time—will result in a favorable change in expectations.

However, it is in the short run that political forces enter, and for fairly obvious reasons. When the short-term effects of monetary restraint lead to a rise in unemployment, a shift in national priorities usually follows, from curbing inflation to reducing joblessness. In general, those political pressures effectively prevent the monetary authorities from continuing the posture of restraint which, if it had been maintained long enough, could have altered expectations and yielded the results generally desired by society, notably a lowered rate of inflation. Indeed, expectations in practice generally are based on the working of this cycle in the political economy. The institutional and policy changes proposed here, however, are designed to enhance the effectiveness of the traditional tools of monetary and fiscal policy.

In the long view, it may well be that during the coming decade, this nation may be increasingly—albeit always reluctantly—resorting to greater controls over wage and price decisions in imperfect labor and product markets, *unless* we take strong actions to reduce those market imperfections. The policy choice that lies ahead for the United States is likely to be between (1) fostering a greater degree of competition in strong private markets, with a simultaneous reduction in the degree of governmental intervention, and (2) relying more heavily on government control of and subsidy to an enterprise system which is only nominally private. On the grounds of both efficiency and equity, I vote for the first alternative.

July 1980

Monetary and Fiscal Discipline: The Basics of Inflation Control

Raymond J. Saulnier
Professor Emeritus of Economics
Barnard College
Columbia University

There is a good deal of it in Western Europe, but apart from the quantitative side of what the Federal Reserve is doing there is not much in U.S. policy today to suggest a respect for using basic macroeconomic correctives to overcome inflation. Still, if the failure of approaches that reject basics, or use them lopsidedly or inadequately, can be an occasion for reviving interest in an approach that is grounded on them, there is reason to expect a revival. Other approaches have failed, but obviously not enough to prevent large segments of thinking about inflation control from proceeding on a wrong track.

Granted, opinions differ on what should comprise a program of inflation control directed to basics, but the differences are not enough to obscure its general character. The content is closest, of course, to what monetarism prescribes, but it need not be, and had better not be, the one hundred percent monetarism that has had such a vogue lately. Money policy is the absolutely essential ingredient, but fiscal policy plays a crucial role. and I believe two other components are needed, to which I will come in due course. There is no place for direct wage/price controls, voluntary or mandatory.

Money – The Essential Ingredient

Failure to accept the need for basics is often a failure to understand the role of money in inflation, though it is hard to see why this role should not be clear. After all, what is at issue is the value of money, and the value of money tends to settle where it is driven by its supply relative to the supply of whatever money seeks to buy. It follows that any program of inflation control that does not provide for money supply control will not work; and a program that does provide for it needs little else to support it.

How to prove this is another matter; it is obvious it hasn't been proved – in professional circles, for the media, or for the public generally. For example, each annual report by the Council of Economic Advisers under President Carter has relied mainly on something other than money to explain the inflation that accelerated during its incumbency;[1] and the Spring 1980 issue of ECONOMIC OUTLOOK USA included two papers by highly respected economists which, if I read them correctly, attribute inflation mainly to essentially nonmonetary conditions.[2]

Pragmatic considerations should settle the argument: money explains what needs to be explained better than anything else. Anyone asked to guess the inflation rate of a country would be best advised to look at what is happening to its money supply; and it is surely conclusive that countries that have done best in holding inflation down have held money supply down, while those that have failed to control inflation have failed to control money supply.

But the argument has obviously not been settled. The trouble may be, and I think it often is, that monetarists push their case too far. They give too little attention to the credit-extension side of the money-creating process and to forces that propel changes in the volume and use of money. And they often underplay the federal budget as it affects the conduct and results of monetary policy. However, these are avoidable faults in the application of a theory that is sound in basic design.

Why the Basics are Ignored

Why, then is there so much suport for approaching inflation control in ways not directed to basics? There are two principal reasons – sometimes separate, sometimes overlapping. The first is technical and economic. Inflation is blamed on OPEC, on Russian grain deals, or on some other incident in which an episodic price boost is given to a specific item, even though inflation is a continuing, not an episodic, process that involves virtually every price in the economy. In other cases, inflation is attributed to the momentum of cost and price increases in the preceding period, though this comes down to explaining inflation today by inflation yesterday, as if it were a kind of perpetual-motion process, operating without fuel. Still another explanation invokes an inflation psychology theory, which can be useful only so long as one remembers that psychology is not legal tender and at some point requires money or credit to be made effective in the market. Finally, a nonmonetarist theory is implied by proposals that would treat inflation by working on the supply side of the economic equation, when the possibility of lifting real output enough on a continuing basis to close the inflation gap caused by monetary excesses is clearly not great, to say nothing about what the effort would do to an already excessive volume of demand.

But more often an anti-inflation program directed to basics is rejected for reasons that are essentially social, humanitarian, even political, on the ground that its costs in unemployment and lost output would be too high. Thus Bosworth writes: "In the extreme case, fiscal and monetary restraint can break the momentum of the current inflation, but the costs in terms of unemployment [would] be enormous." And Juster concludes that "there is little doubt that

[1] See the writer's reviews of successive Economic Reports in the *Journal of Portfolio Management*, Summer Issues 1977, 1978 and 1979.

[2] Barry P. Bosworth, "Conflicts in Economic Policy," and F. Thomas Juster, "Dealing with Inflation: Policy Alternatives," ECONOMIC OUTLOOK USA, Spring 1980, Vol. 7 No. 2.

sufficiently severe monetary and fiscal constraints would in fact reduce the inflation rate down to any desired level. But...no one can guarantee that such a policy would not produce an economic disaster...."

Now, no one can deny that monetary and fiscal restraints can be used excessively, but it is surely wrong to invoke the disaster that would follow from using them excessively for not using them at all, or for using them in a way that would almost certainly ensure their not working. And to suggest as is often done, that the use of basic restraints where the momentum of inflation is high is bound to be excessive comes close to begging the question. But Professor Juster dismisses them, presumably having the present U.S. situation in mind, even if used gradually. Thus he writes: "If the U.S. were a very patient society... gradualism might work...but this is not a very patient country...hence I have almost no confidence that gradualism will...be successful." In a mood of despair he finds himself "...left with some kind of [direct] controls policy as the best of a bad lot of policy alternatives."

Bosworth does not go that far: he would use basic restraints, but in a context which I believe would ordain their failure. Asserting that " ... the current inflation cannot be interpreted within the traditional context of excess aggregate demand," and believing that "a mild recession is too weak [to break inflation's momentum] and voluntary incomes programs have lost their credibility," he concludes that "there is still the possibility that a combination of controls and demand restraint can reduce the magnitudes of unemployment and idle capacity substantially below those required by a policy of relying on demand restraint alone."

The Bosworth conclusion is, of course, where policy has usually come out. My trouble with it is that the semblance of success that direct controls typically provide in the beginning phase of the combination policy he proposes invites an inadequate use of the basic correctives. Time and again, a program launched with the understanding that direct controls will be used only to "buy time" to do the fundamental things fails because the fundamentals are never applied adequately. Bosworth agrees that "demand restraint must be one element of the program," but when what he asks for is "some" demand restraint, I can see failure in the wings.

A Recommended Comprehensive Program

We do indeed need a comprehensive program: the question is what its contents should be. Where I part company with strict monetarism is in the importance I attribute, alongside money supply discipline, to how government handles its budget. It is not merely a matter of setting a good example of financial housekeeping, though a good example in this is not to be demeaned; hard financial and monetary consequences are involved in how the budget is handled. It is true that, in the abstract, an adequately noninflationary monetary policy can work alongside a budget policy that involves large deficits, but in that case money policy must be all the more severe on the private economy, where it has its impact. This is the case for a balanced budget, by which I mean a policy that allows federal spending to get significantly out of line with revenues only when recession makes inroads on the latter. It is not a matter of how one feels about public *v.* private effort, though this is a vitally important question in its own right. It is a question of how one maintains control most effectively over money supply and aggregate demand.

Two other elements can be helpful in practice, may even be essential in supporting monetary and fiscal restraints, though I mention them only briefly. One concerns things government does that boost prices, limit supplies, raise and rigidify wage costs, etc., including nowadays especially the contracts it makes with its own employees. An effort was made in 1959-60 under a *Cabinet Committee on Government Actions Affecting Costs and Prices* to monitor and influence these actions in ways supportive of price stability, and there was a revival of interest in such activity during the Seventies, but it is still an underdeveloped area of public policy. The other would be to devise and implement a program, which we do not now have, to deal with structural unemployment on a scope truly commensurate with the magnitude and complexity of that problem. Not having such a program has the effect during recession of attributing to the macroeconomic methods used to combat inflation an unwarranted degree of responsibility for unemployment and lost output. Obviously, the program must be designed and administered so as not to frustrate anti-inflation efforts.

Recent Lack of a Basic Program

So much for what an anti-inflation program directed to basics should be: what we have had to date bears little resemblance to it. No one can say fairly that a basic anti-inflation policy has failed in the United States; we have not had such a policy, certainly not since 1965. The most recent chapter in our misadventures involved a credit explosion in which private borrowing rose to a peak of $425 billion (annual rate) in 1979:3, 22 percent above what it had been only six months before, and was followed in 1980:1 by Treasury borrowing that reached a $60 billion annual rate, nearly half again as large as the proportion of credit market funds taken in 1979.

Credit explosions involve money supply explosions, and we had one. After having been flat to only moderately increasing for about six months (depending on what measure is used), money supply and liquidity rose in the six months through September 1979 at rates varying from 8.1 (M1A) to 11.3 (L) percent a year, transforming the cyclical prospect from one in which meaningful inflation-reduction without recession might have been possible to one in which recession was inevitable. In fall 1979, and more resolutely in early 1980, the monetary brakes were put on, and put on hard, as they had to be. What this sequence of monetary expansion followed by restraint meant for inflation and interest rates in early 1980 is all too familiar—it came close to being a financial disaster. It was no surprise that the business cycle turned from up to down.

The Short-term Outlook

How far recession goes will, of course, have a crucial bearing on how policy develops in the months ahead. More immediately, however, policy will be shaped by policymakers' perceptions of how far recession is likely to go. But these perceptions are often mistaken, usually on the side of being unnecessarily pessimistic, and this could happen again. As I read the evidence, the present

downturn will fall short of the 1974-75 decline, which means that inflation reduction can continue to have top priority, and that measures taken to promote recovery should be so designed as to avoid reigniting inflation.

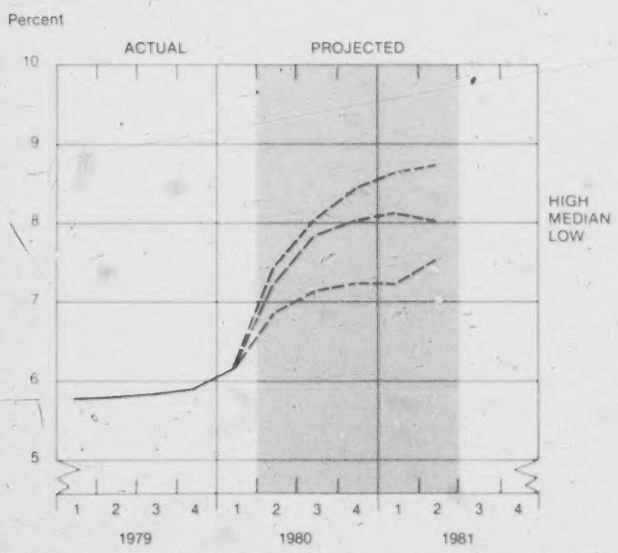
In my judgment, such a policy would provide for

- continuation of present guidelines on money supply growth;
- fiscal 1981 budget expenditure increases held well below the 16 to 17 percent likely in fiscal 1980;
- no tax reductions until revenues suffice to allow productivity-improving changes in the tax code without inflating deficits that will be immense in any case.

There is little indication, however, that things will go that way. Money policy will probably fit the formula, but the increase of federal spending in fiscal 1981 could well exceed the fiscal 1980 increase and in any event is unlikely to be much below it; and a tax cut that could inflate to around $80 billion a budget deficit likely to reach $50 billion even without it has almost nothing but advocates. Reliance on direct controls might be significantly increased in such a context – even moving to a mandatory system if inflation accelerates noticeably with recovery, as it could – but what seems inevitable is a degree of confrontation between the Federal Reserve, intent on reducing inflation by monetary discipline, and the rest of government, legislating a combination of large spending increases and tax cuts. Whether this will involve fairly soon another credit crunch and another economic reversal, and to what extent it will lead into an acceleration of cost and price increases, cannot as yet be seen. But the way the dialogue on policy is going, it is easy to be overly optimistic about the prospect.

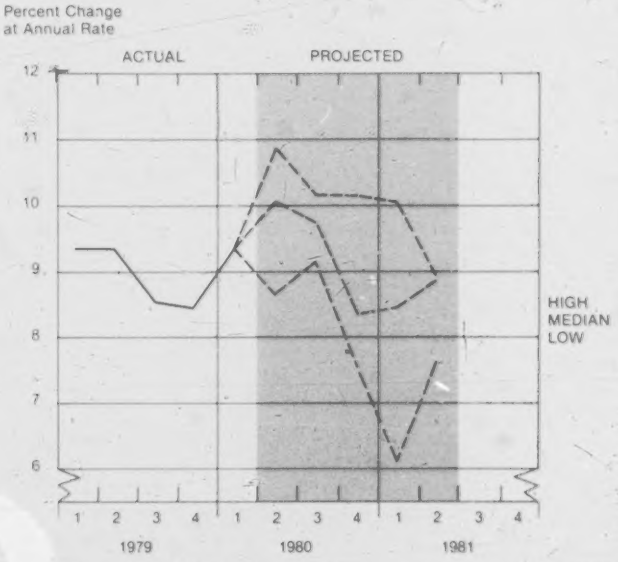
July 1980

UNEMPLOYMENT RATE



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

GNP IMPLICIT PRICE DEFLATOR



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

Consumer Confidence at Record Low

Richard T. Curtin
Director, Surveys of Consumer Attitudes
Survey Research Center
The University of Michigan

Record Low Levels

In the April-June 1980 surveys, the Index of Consumer Sentiment was 54.4, down from 63.5 recorded in the first quarter 1980 surveys, and 66.6 in the second quarter of 1979.* The April-June average reading of 54.4 is the lowest quarterly figure on record, below the low of 58.0 recorded in the 1974-75 recession. The most significant declines since early 1980 have occurred in attitudes toward buying conditions, due to high interest rates and tight credit conditions.

The decline in sentiment was widespread across income, region, and age subgroups. Among families with incomes of $20,000 and over, the Index figure was 57.0 in the second quarter 1980 surveys, down from 68.0 in January-March 1980, and nearly identical to the record low of 56.5 recorded in the 1974-75 recession. Across the four major geographic regions, the Index of Consumer Sentiment ranged from a low of 52.1 (South) to a high of 57.3 (West)—an insignificant differential—and for each region the April-June 1980 reading was below the prior record low in 1974-75. Respondents aged 35 to 54 recorded the greatest loss in sentiment in the second quarter 1980 surveys, with the Index ranging from 47.9 for those aged 35 to 54 (down from 61.9 in early 1980) to 63.1 for those under age 35 (down from 69.9).

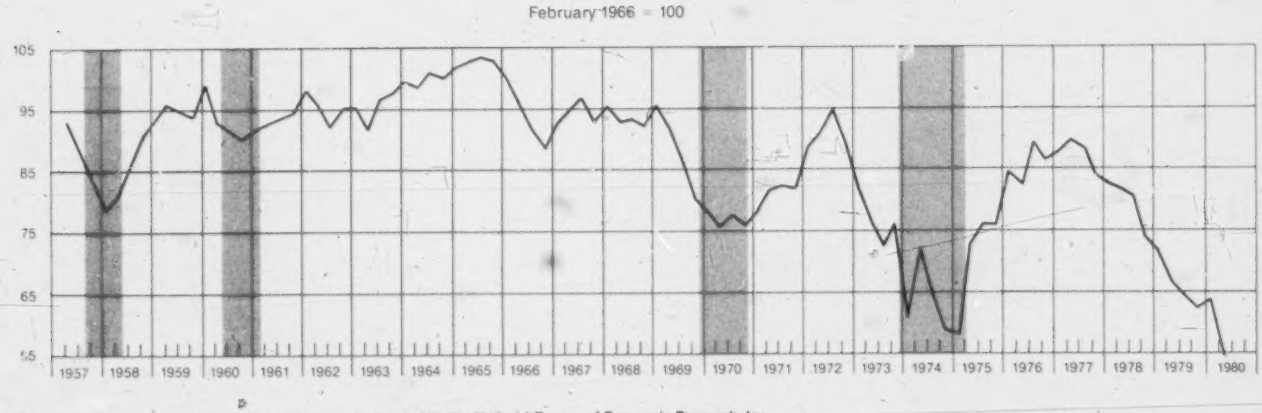
*The method of calculation for quarterly Index values was changed recently: the quarterly measure is now the simple average (mean) of the three monthly surveys conducted during that quarter. All Index values since 1978:1 have been recalculated and are displayed in the Index of Consumer Sentiment chart.

In comparison with prior declines, the current decline in consumer sentiment has lasted longer than average, but the decline has not been as steep as recorded in 1972-75. The last cyclical peak in the Index was recorded in the second quarter of 1977 (89.1), and in the three years since then, the Index has declined a total of 34.7 points—nearly equal to the total decline of 36.1 points recorded in 1972-75, but over a six-month longer time span (see Table 1). The April-June 1980 record low continues the trend of secular decline in trough values since the 1965 peak level was reached. The cyclical trough values for the Index fell from 88.3 in 1966, to 75.1 in 1970, 58.0 in 1975, and 54.4 in 1980. Each of the component questions reached new cyclical lowpoints during the current period of decline, except for five-year business expectations, which recorded a low nearly identical to the 1975 lowpoint. Except for evaluations of market conditions for durable goods, which have not exhibited a secular downward trend in peak levels, the 1977 peak levels of the component questions were comparable to the trough values recorded in 1966.

Heightened Fears of Unemployment

News items heard and recalled of recent changes in business conditions were overwhelmingly negative in the second quarter 1980 surveys by a margin of 94 to 12 percent. During the past year, the content of news recalled has shifted from a focus on inflation and energy problems to tight credit conditions and growing unemployment. In the second quarter 1980 surveys, 37 percent of all respondents mentioned hearing of increases in unemployment, up from 12 percent recorded a year earlier. News of high interest rates and tight credit conditions were spontaneously men-

INDEX OF CONSUMER SENTIMENT



Note: Shaded areas indicate recession periods as designated by the National Bureau of Economic Research, Inc.

Table 1. PEAK AND TROUGH VALUES IN FOUR PERIODS OF DECLINE

	Periods of Decline			
	1965-66	1969-70	1972-75	1977-80
Length of Decline (quarters)	5	6	10	12
Index of Consumer Sentiment				
Peak	103.4	95.1	94.1	89.1
Trough	88.3	75.1	58.0	54.4
Decline	*-15.1*	*-20.0*	*-36.1*	*-34.7*
Current Personal Finances				
Peak	138*	116	125	108
Trough	108	99	81	77
Decline	*-30*	*-17*	*-44*	*-31*
Expected Personal Finances				
Peak	135	130	131	121
Trough	120	119	99	92
Decline	*-15*	*-11*	*-32*	*-29*
Twelve-Month Business Expectations				
Peak	168	148	141	127
Trough	139	94	44	35
Decline	*-29*	*-54*	*-97*	*-92*
Five-Year Business Expectations				
Peak	136	116	106	104
Trough	110	75	47	48
Decline	*-26*	*-41*	*-59*	*-56*
Buying Conditions for Durables				
Peak	152	147	147	149
Trough	115	91	96	88
Decline	*-37*	*-56*	*-51*	*-61*

*Table entries for components of the Index are sample proportions giving favorable replies minus the proportions giving unfavorable replies, plus 100.

tioned by 16 percent in 1980:2, up from 3 percent in 1979:2.

The view that business conditions worsened during the past year was nearly unanimous by mid-1980. Among all families, 86 percent judged current business conditions as worse than those of a year earlier, up from 66 percent in the first quarter of 1980 and 50 percent in the second quarter of 1979. Bad times financially in the economy as a whole during the next 12 months were expected by 78 percent of all respondents in the second quarter 1980 surveys—a new record level. The major reason for the sharp increase in unfavorable business evaluations was heightened fears of spreading unemployment. Unemployment was expected to increase during the next 12 months by 66 percent of all respondents in the 1980:2 surveys, up from 52 percent in 1980:1 and 46 percent in 1979:2. Overall, one in three families reported that business conditions had worsened during the past year *and* expected them to further worsen in the year ahead, a significant increase from the one in four families who expected continuous declines in the first quarter of 1980.

Long term business expectations first reached record low levels in mid-1979 and have remained largely unchanged at those depressed levels since then. In the second quarter of 1980, two-thirds of all families expected bad times financially in the economy as a whole during the next five years.

Lower Interest Rate and Inflation Expectations

Interest rates were expected to decline in the year ahead by 43 percent of all respondents in the second quarter 1980 surveys, up dramatically from the 17 percent who expected declines in the first quarter surveys, and 8 percent in the second quarter of 1979.

In the April-June 1980 surveys, consumers expected inflation to average 9.1% during the next 12 months, down from the 11.9% all-time peak recorded in the January-March 1980 surveys. This represents the first quarterly reading of less than double-digit inflation expectations since 11.1% was recorded in the April-June 1979 surveys. Among all families, the proportion who expected double digit inflation fell from 52 percent in January-March 1980 to 39 percent in the second quarter. The proportion of respondents who expected prices to remain the same or decline increased to 26 percent in the April-June 1980 surveys, up from 10 percent in first quarter 1980.

Heightened fears of unemployment coupled with some lessening in inflation expectations led to a significant shift in opinion toward unemployment rather than inflation as the more serious economic problem facing the nation. In the second quarter 1980 surveys, 36 percent of all respondents mentioned unemployment rather than inflation as the more serious economic problem, up from 25 percent in the first quarter of 1980. In addition, the proportion of respondents who felt that unemployment and inflation were equally serious rose from 7 percent in 1980:1 to 14 percent in 1980:2.

Confidence in government economic policy to combat inflation and unemployment in the second quarter of 1980 equalled the prior low under the Carter administration, which was first recorded in mid-1979. Among all respondents, 44 percent rated government policy as poor in April-June 1980, 45 percent gave it a fair rating, while just 7 percent rated policy as good.

Personal Finances Strained

Nearly half of all families (48 percent) reported in the second quarter of 1980 that their personal financial situation had worsened during the past year—a new record low reading. When asked to explain why their financial situation had worsened, references to inflation continued to dominate their responses. In addition, fewer respondents mentioned receiving income increases in 1980:2 than a year earlier, and somewhat more frequently mentioned income declines in 1980 than in 1979.

Expected increases in nominal income during the year ahead remained widespread in the first half of 1980. Among all respondents, 31 percent expected family income

increases to average 10% or more during the next year, up from 29 percent in the first quarter of 1980, and 26 percent in the second quarter of 1979. The continued strength in nominal income expectations coupled with some lessening in inflation expectations has not, however, significantly improved real income expectations. In 1980:2, 47 percent of all respondents expected real income declines during the next year, somewhat below the 52 percent recorded in 1979:2. Nonetheless, 40 percent of all families in the second quarters of 1979 and 1980 reported that their income had increased by less than prices during the past year *and* expected their income to increase by less than prices during the year ahead.

Sharp Decline in Buying Attitudes

In the second quarter 1980 surveys, the majority of all consumers held unfavorable attitudes toward buying conditions for durable goods (51 percent), vehicles (55 percent), and houses (71 percent). The recent declines were due both to a continued shift from buy-in-advance price rationales toward postponement because of high prices and to perceptions of high interest rates and tight credit conditions.

Sharp increases in unfavorable attitudes toward buying conditions for houses were recorded during the past year. In the second quarter of 1980, 71 percent of all families rated buying conditions for houses as unfavorable, up from 60 percent in the first quarter of 1980, and 41 percent in the second quarter of 1979. The dramatic declines in favorable house buying attitudes during 1979-80 were mainly due to increasing concern about high interest rates coupled with declines in price expectations. By 1979:2, following the announced tightening in monetary policy in November 1978, references to high interest rates and tight credit conditions making buying conditions unfavorable began to rise significantly. By mid-1979, 28 percent of all respondents mentioned unfavorable credit conditions when evaluating the housing market, up from 11 percent a year earlier. By 1980:1, following the November 1979 monetary policy change, unfavorable evaluation of credit conditions for the housing market doubled in frequency, with 56 percent of all respondents mentioning high interest rates and tight credit conditions. Following the March 1980 credit restrictions, the proportion of respondents who mentioned high interest rates or tight credit conditions rose to 72 percent. Over the same time period, buy-in-advance price rationales fell to just 9 percent in 1980:2, from 35 percent in 1979:2.

Favorable buying attitudes towards durable goods were held by just 39 percent of all families in the April-June 1980 surveys, down significantly from the 58 percent recorded in the first quarter of 1980, and 62 percent recorded in the second quarter of 1979. From the first to the second quarter of 1980, attitudes toward buying conditions for durable goods underwent a sharp reversal: in the first quarter favorable exceeded unfavorable attitudes by a margin of 58 to 32 percent, while in the second quarter unfavorable exceeded favorable attitudes by a margin of 51 to 39 percent. When asked to explain their attitudes toward buying conditions, mentions of buy-in-advance price rationales fell to 26 percent in 1980:2, from 41 percent in 1980:1; postponement due to currently high prices increased to 31 percent in the second quarter, from 20 percent in the first quarter of 1980. Importantly, high interest rates and tight credit conditions were spontaneously mentioned by 28 percent of all respondents in 1980:2, up significantly from the 14 percent recorded in 1980:1, and just 7 percent recorded in 1979:2.

Favorable attitudes toward buying conditions for vehicles were held by 34 percent of all respondents in the second quarter 1980 surveys, down from 44 percent in the first quarter of 1980. Among all respondents, just 9 percent mentioned buy-in-advance price rationales in the April-June surveys, down from 24 percent a year earlier. Unfavorable mentions of high interest rates and tight credit conditions rose markedly, from 5 percent in 1979:2 to 25 percent in 1980:2. Compared with mid-1979, however, there has been a significant increase in the proportion of families who mention favorable buying conditions due to price discounts and rebates (6 to 22 percent).

Summary Outlook

The persistent and widespread decline in consumer sentiment during the past several years has been reflected in significant declines in discretionary spending. Although the current recession has been tentatively dated as starting at the beginning of 1980, car sales and housing starts have been in decline since reaching cyclical peak rates in the second quarter of 1978 (see Table 2). Buy-in-advance rationales in response to escalating inflation helped to forestall sharp declines in spending through much of 1978 and early 1979. By mid-1979, however, growing resistance to high interest rates, which were increasingly expected to decline in the future, coupled with somewhat reduced price expectations, led to more significant declines in spending.

Table 2. AUTOMOBILE SALES AND HOUSING STARTS

Year:Quarter	Retail Car Sales		Housing Starts
	Total	Domestic	
1974:2	9.267*	7.967*	1.515*
1975:2	7.867	6.267	1.071
1976:2	10.000	8.633	1.450
1977:2	11.433	9.133	1.919
1978:2	11.933	9.867	2.097
1979:2	10.533	8.033	1.820
1980:2	7.669	5.504	1.045

*Table entries are in millions of units, seasonally adjusted at annual rates.

In recent months, concern with spreading unemployment rather than fear of inflation has been responsible for lowered consumer confidence, although the March 1980 credit restrictions greatly increased concern with credit conditions and led to an accelerated deterioration in favorable buying attitudes. Lower interest rates and greater credit availability will lead to some improvement in consumer sales during the balance of 1980, but lagging real incomes and depleted savings will slow the pace of any subsequent recovery.

August 1980

The Michigan Quarterly Econometric Model: Midyear Forecast

**E. Philip Howrey, Saul H. Hymans,
Harold T. Shapiro, and Joan P. Crary
Department of Economics
The University of Michigan**

As in the Spring 1980 issue, we present here highlights of the latest update of the Michigan Quarterly Econometric Model forecast presented originally at the 27th annual Conference on the Economic Outlook last November. Comments below are excerpted from the authors' report released August 8, 1980.

Overview of the Control Forecast

As we had forecast last November, 1980 will be a recession year. Growth rates in real GNP for 1980 and 1981 are forecast at -1.4 percent and 1.0 percent respectively. This compares to growth rates in the real output of goods and services for the two preceeding years—1978 and 1979—of 4.4 percent and 2.3 percent. Thus the declining growth rate in real GNP that began in 1979 is forecast to continue in 1980, when real GNP is forecast to fall on a year-to-year basis by almost $20.0 billion (1972 dollars). Our forecast indicates, however, that the recession is limited to 1980, as positive growth rates in real GNP, aided in part by an assumed $30 billion tax cut, resume in 1981. The initial year of the expected expansion, however, registers only modest gains in the volume of goods and services produced, as the level of real GNP forecast for calendar 1981 does not regain the level achieved in 1979.

As might be expected in an economy forecast to be characterized by a recession (1980) and slow recovery (1981), average unemployment rates for 1980 and 1981 are forecast to rise sharply to levels of 7.7 percent for 1980 and 9.0 percent for 1981. Real disposable income and corporate profits are also forecst to be heavily impacted by the recession. On an annual basis corporate profits are projected to fall in both 1980 and 1981, while real disposable income follows a pattern similar to real GNP, falling in 1980 (by 0.5 percent) and recovering modestly (by 0.4 percent) in 1981.

Our forecast clearly identifies the components of aggregate demand expected to show the greatest weakness over the forecast horizon. On an annual basis expenditures in the automotive and residential construction sectors experience the greatest relative declines during the 1980 recession. Business expenditures on plant and equipment are projected to experience a more modest decline in 1980, but unlike the forecast revival of expenditures in both the residential construction and automotive sectors in 1981, real plant and equipment outlays are expected to continue their decline. Substantial growth in the volume of U.S. exports and government purchases help to moderate the decline experienced in other sectors of the economy in calendar 1980 and also make modest contributions to the expansion forecast for 1981.

The movement of inventory stocks is often a critical element in the dynamics of business cycles. During the expected 1980 recession, however, we forecast only a relatively modest adjustment in inventory levels; and, as will be clear from the quarterly detail to be discussed below, these adjustments are forecast to be largely responsive to initial movements in final sales.

Finally, on an annual basis only minimal relief from current inflation rates is forecast. Although inflation in energy prices can be expected to be considerably more modest in the next year and a half, sharper increases are forecast in farm prices, and the underlying inflation rate still remains high. A more usefui understanding of the forecast path for inflation rates can be obtained from considering the quarterly detail that is discussed below.

Details of the Control Forecast

The Control Forecast clearly implies that the economy is in the midst of a relatively short recession. The principle summary measures derived from the forecast are as follows:

- A third-quarter decline in real GNP of 4.2 percent (annual rate) follows the 9.1 percent (annual rate) drop experienced in the second quarter. This is followed by virtually no growth in the fourth quarter and then quarterly increments that average 3.5 percent (annual rate) during 1981. Thus the economy gives no real evidence of recovery until the first quarter of 1981.
- The unemployment rate rises steadily from its second quarter level of 7.5 percent to 9.2 percent in the first and second quarters of 1981. The unemployment rate begins to decline in the third quarter and is down to 8.8 percent at the end of 1981.
- The rate of inflation, as measured by the nonfarm business price deflator, remains nearly constant over the next four quarters at about 9.1 pereent (annual rate) and then tapers off to a fourth-quarter rate of 7.5 percent in 1981. This translates into a little more than a 12 percent annual rate of inflation in the consumer price index over the next four quarters with a decline to 11.1 percent (annual rate) at the end of 1981.

There are several key elements that contribute to the recovery that begins to materialize in the fourth quarter of this year and which is clearly in evidence in the first quarter of 1981. The two demand categories that show the greatest strength during the recovery phase of the cycle are residential construction and consumer purchases of durables, especially automobiles. The volume of residential construction in real terms has been declining slowly but steadily from the second quarter of 1978 through the fourth quarter of 1979. A somewhat larger decline in residential construction took place in the first quarter of 1980, and the magnitude of the reported second quarter decline from $51.7 to $41.1 billion (1972 dollars) is virtually unprecedented. The Control Forecast projects minimal further declines in residential construction activity to a level of $39.9 billion in the fourth quarter and then steady expansion of the housing market through the end of the

forecast horizon. The $48.8 billion forecast for residential construction in the fourth quarter of 1981 translates into an annual rate forecast of 1.5 million new housing starts, up from a projected level of 897 thousand in the third quarter of this year. The recovery in housing is due primarily to two factors: the easing of credit conditions and the increase in real disposable income which emerges in the second quarter of 1981 and which is due, in part, to the tax relief package included in the Control Forecast.

Real purchases of automobiles and parts have exhibited a downward trend since the second quarter of 1979. New car sales dropped rather precipitously from an annual rate of 10.7 to 7.7 million units between the first and second quarter of this year. Sales in the third quarter are expected to remain virtually unchanged from the second quarter value, but will begin to recover in the fourth quarter with the introduction of the new models.

A third key variable in the current economic outlook is inventory investment. Based on the aggregate inventory-sales ratio, the level of inventories in the first quarter of 1980 was very much in line with first-quarter final sales. The dramatic decline in final sales in the second quarter ($36 billion 1972 dollars) coupled with a modest increase in inventories left the inventory-sales ratio at what would be regarded as high by historical standards. Some decline in inventory stocks is therefore expected in the next two quarters, but as final sales stabilize and then begin to pick up, inventory accumulation will, in 1981, provide an additional stimulus to aggregate demand.

In summary, residential construction, consumer purchases of durables, and investment in inventories lead the recovery. The net effect of the foreign sector, as measured by real net exports, is essentially neutral. In addition, the government budget provides a distinctly modest expansionary influence on the economy.

The 1980 recession will be the fifth recession experienced by the U.S. economy since the mid 1950s. It is useful to place this current recession and ensuing recovery in historical perspective. Dating the lower turning point in real gross national product in the third quarter of 1980 gives a two-quarter duration for the current recession. Since the recovery is not expected to be in evidence until the first quarter of 1981, the lower turning point might alternately be designated as the fourth quarter. In either case, the duration of this recession is similar to the 1957-58, 1960, and 1969-70 episodes but considerably shorter than the 1974-75 recession. In terms of the peak-to-trough decline in real output, the current recession is slightly more severe than 1957-58 but less acute than the 1974-75 recession. In this context the 1960 and 1969-70 recessions are appropriately considered mini-recessions.

The increase in the unemployment rate also puts this recession midway between the 1957-58 and 1974-75 swings. There is, however, an important major difference in these three recessions. Over time we have entered each of the major postwar recessions at a somewhat higher rate of unemployment. Thus the unemployment rate is expected to peak at a higher level (9.2 percent) in the current recession than in 1974-75, when it reached a high of 8.9 percent.

The leading villains in the current recession, consumer durables and residential construction, are forecast to behave very much like they did in the 1974-75 decline, as is business fixed investment. Corporate profits on the other hand exhibit a somewhat larger percentage decline in this recession than in any of the postwar recessions. In summary, however, there is no evidence that the general features of the current recession are significantly different from its predecessors.

An Alternative to the Control Forecast

Recently there has been substantial debate regarding the need for—and the form of—a substantial tax cut in 1981 or sooner. We believe the balance of the evidence suggests that a tax cut will be enacted, to be effective as of the second quarter of 1981. Consequently as noted above we have incorporated a $30 billion tax cut—approximately ⅔ personal and ⅓ business—in our control forecast. In order to evaluate the impact of such a program we have generated an alternative forecast in which there is no 1981 tax cut.

Analysis of this alternate forecast indicates that the impact of the tax cut over the range of our forecast (through 1982:1) can be summarized as follows:

- In our control forecast real output is forecast to grow 3.6 percent from 1981:1 to 1982:1. Without the tax cut the growth rate over the same period is forecast to be only 2.7 percent.
- The slower growth in our alternate forecast yields an unemployment rate which declines to 9.0 percent by the end of the forecast period as compared to the 8.6 percent predicted in the control forecast.
- There is virtually no difference between the two forecasts with respect to the rate of inflation, as measured by the GNP deflator, over the period 1981:1-1982:1. The reason for this is that in the control run increases in productivity are sufficient to offset the impact of rising aggregate demand on prices.
- The tax relief program in our control forecast has a larger impact on corporate profits with IVA and capital consumption adjustment—which are forecast to grow 23 percent from 1981:1 to 1982:2 with the tax cut—than on disposable personal income, which is projected to grow 10.8 percent over the same period. In the absence of a tax cut profits are projected to grow only about half as much (11.9 percent) from 1981:1 to 1982:1 while disposable personal income is forecast to grow 9.5 percent.

A forecast horizon that ends in 1982:1, four quarters after the tax relief program becomes effective, is too brief a period to capture the full impact of such a program on the economy. This is particularly true for investment expenditures, given the lagged responses that characterize this sector. In the initial quarter of the tax cut (1981:2) real consumption expenditures are $4.8 billion (1972 dollars) higher in the control forecast than in the alternate while real business fixed investment is $0.6 billion higher. By 1982:1 real consumption expenditures are $7.8 billion higher in the control forecast, and real investment is $5.4 billion higher, yielding a real GNP about $13 billion higher in the control forecast than in the alternate in 1982:1.

Concluding Comments

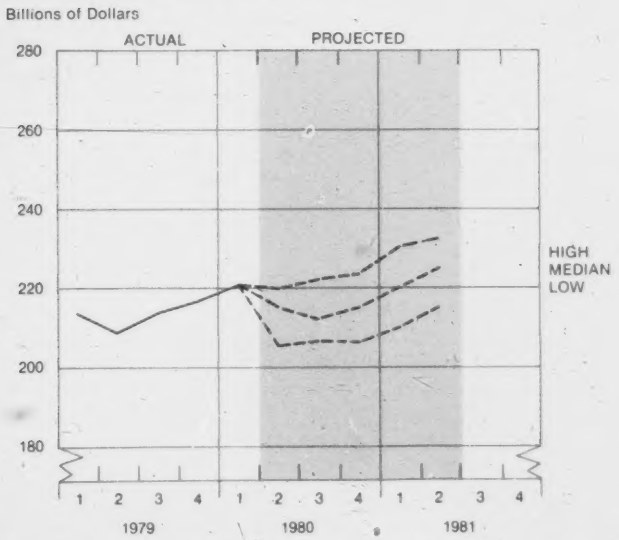
Our control forecast incorporates cuts in both personal and business taxes, effective April 1, 1981, that total $30 billion. In our judgment a tax relief program of roughly this magnitude will have an important and salutary effect on the economic recovery from the 1980 recession. Such a

fiscal stimulus is not required to turn the economy from recession to expansion, but it will support and strengthen the expansion which we forecast to begin at the turn of the year. If logistically possible, given Congressional calendars, an even earlier effective date should be considered. Further, to the extent that investment-related tax incentives for business and households are incorporated into the overall tax package, we can simultaneously address the cyclical issues and a secular challenge regarding the longer-run productive capacity of the U.S. economy.

Our control forecast also projects a "steady" course for monetary policy with no major realignments of international exahange rates. If monetary policy were to move to a sharply more restrictive stance, perhaps in response to a severe disturbance of the international monetary system, and should a tax cut not be enacted, the economic recovery could very well "stall out." The major uncertainty with respect to the international monetary system stems from the effect of simultaneous economic slowdowns in the major industrialized economies on the financial viability of the major oil-importing, less developed countries. Should a major less developed country default on its outstanding loans, the shock to the international monetary system would not only be severe, but could also threaten the viability of particular domestic monetary institutions.

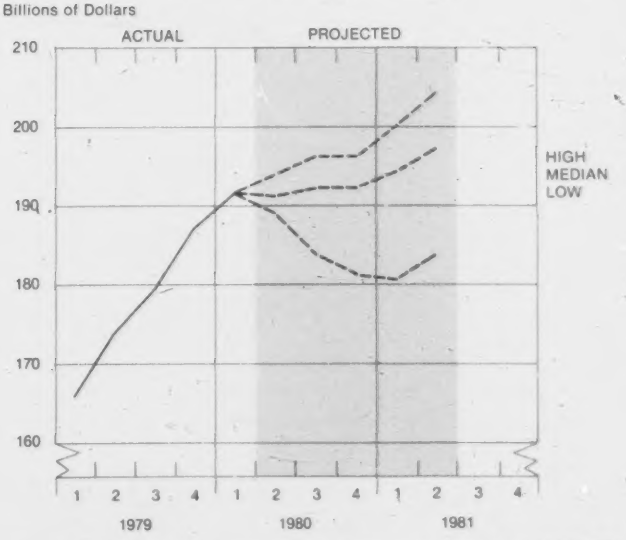
It will be critical, therefore, in the coming months, to monitor not only domestic economic developments but developments in the international economy. Policy makers may have to respond to important developments in both areas.

CONSUMER DURABLE OUTLAYS



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

BUSINESS CAPITAL OUTLAYS



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

Disinterest, Disaffection, and Participation in Presidential Politics

Warren E. Miller
Director, Center for Political Studies
Professor of Political Science
The University of Michigan

The Problem Restated

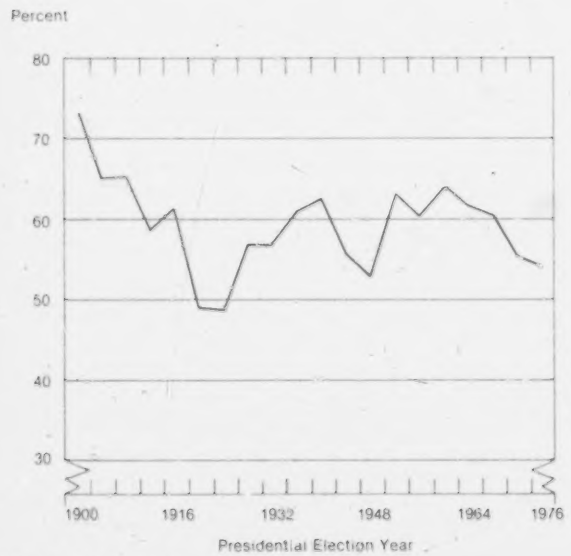
The level of voter turnout has become a biennial preoccupation of those concerned about the nation's political health. Since 1960, when some 64 percent of those eligible to vote went to the polls, there has been a continuous decline (see the chart). In recent years, the decline in the relative number of American voters has been linked with other signs of national political malaise. Even at the peak of voter participation there were occasional expressions of concern among those who compared the American experience with the notably higher turnout rates usually recorded in other western democracies, but now the erosion of partisanship and the apparently diminished role for the political parties have been joined with the precipitous decline in trust and confidence in government. They have all been taken to signal the consequences of alienation and indifference that are presumably weakening the foundations of mass political participation necessary for a vital democratic process. In sum, the decline in the proportion of citizens voting on election day has been taken by many observers as the final evidence that our electoral system is in trouble.

Commentaries that link these various indicators of political malaise and, as a consequence, see declining turnout as a forerunner of imminent change in our political system, are flawed on at least two counts. In the first place, the argument that growing disenchantment and disinterest have led to a rejection of the party system and a lack of enthusiasm for participation in electoral politics errs in assuming that the several trends are necessarily linked causally, with decreasing participation as the final reflection of a national malady. In the second place, the argument ignores many other important, perhaps more important, indicators of the sustained health and vitality of the American electoral process. The preoccupation with turnout figures as measures of the health of our national electoral process is too simplistic. It reflects a primitive understanding of the complexity of politics in a nation such as the United States. The preoccupation seems to rest on placing unqualified emphasis on a kind of quantitative egalitarianism wherein it is not only assumed that more participation is better but also that the sheer amount of voting is a sufficient test of the health of the system.

Informed political commentary should take a number of different perspectives into account in the assessment of non-voting. It is true that, from at least two perspectives, the relatively simplistic view of American politics *does* seem entirely appropriate for those interested in the well being of democracy. First, if non-voting in fact reflects alienation, and if increases in non-voting are the result of active rejection of the political system, then an increase in an already high rate of non-voting may indeed indicate or foretell systemic crisis. Even if non-voting reflects only indifference, the problem may still be worrisome, but it may be more a long range than an immediate problem. It is quite possible that indifference is a reflection of satisfaction, and the more satisfied the more indifferent, and, therefore, the more non-voting. Even if this be true, however, persistent non-voting due to indifference may create a pool of non-participants who are inexperienced in the activities essential to democratic government. A reservoir of perennial non-participants may be a benign indicator in good times, but as the experience with the rise of totalitarian mass movements suggests, in the long run it may constitute a major problem for democratic government in times of dire or sudden crisis.

From another quite different perspective, the single-minded interest in turnout in national elections as the prime indicator of the health of the polity has long seemed anomalous. Political analysts never do as well in accounting for the difference between voters and non-voters as they do in accounting for the difference between Democratic and Republican voters. In our attempts to account for a given level of turnout in a presidential election, the basic problem is that many people vote without having any very good or obvious reason for doing so. The proportion of voters consistently runs much higher than the proportion of people who care how the election comes out, or

TURNOUT IN PRESIDENTIAL ELECTIONS, 1900-1976



Source: U.S. Bureau of the Census

who are informed about partisan alternatives, or who articulate any particular reason for going to the polls. Among the interested and informed segments of the population, voting turnout is always understandably very high. But among the largely disinterested and uninvolved, there is always a substantial cadre who nevertheless do turn out and participate even though, by any model of rational behavior, the evidence suggests their choice should be to abstain. Turnout, in other words, has always been such an ambiguous indicator of interest or involvement on the part of the citizen that the real challenge has been to explain who turnout is so high, not why it is so low.

There is yet another perspective which makes a single-minded interest in turnout even less persuasive. That perspective attends to all of the other forms of political participation engaged in prior to any election. Whether in response to invitations from political leaders who seek out constituents' opinions, or whether as a consequence of self-generated desire to voice one's opinions or demands, large numbers of citizens do in fact engage in a wide variety of political activities that are often more certain and less equivocal means of linking leaders with led than is the simple act of casting a single vote. Even without a very highly differentiated or sophisticated view of the political process, it seems reasonable to pay attention to the full variety of actions that, in addition to the vote, connect political leaders to the electorate.

While turnout in national elections has dropped consistently from 1960 on, the proportion of the electorate which has turned out to vote on election day *and* which has also engaged in some other form of electorally relevant participation has remained virtually unchanged across the 16 year span from 1960 to 1976. There is also substantial evidence that general public interest in politics and public affairs has *not* declined since 1960. In fact, self-declared interest in following politics and public affairs has increased rather markedly during this period. Second, throughout the same period the electorate's general sense of the civic obligation to vote has remained very constant and has not declined. Third, personal sense of the efficacy of one's political activity has not matched the drop in election day voting. And fourth, the use of the mass media to follow politics and political campaigns also has not diminished at all during the period of declining turnout. From these perspectives it seems not unreasonable to conclude that, while the sheer proportions of those voting may have declined, the overall quality of national political participation improved between 1952 and 1960 and has at least remained constant during the ensuing years of declining turnout.

Sources of Decline in Turnout

The apparent anomaly created by the persistence of widespread political involvement in the face of decreasing participation at the polls is at least partly resolved when one examines turnout *within* categories of political interest, civic duty, political efficacy, or media use. For example, it becomes clear that the steady decline in turnout between 1960 and 1976 is matched by the steady decline in turnout on the part of those who pay attention to public affairs "only now and then" or "never." On the part of those who report they are attentive "most of the time," there was a small drop in turnout between 1960 and 1964, but thereafter the turnout rate has remained virtually unchanged. The same is true where citizen duty is concerned. It is among those with the *least* sense of civic obligation to vote that there has been the sharpest decline in voting rates; turnout has remained at a high level among the persistently large group with the greatest sense of civic obligation. All of this suggests that the decline in election day voting has been concentrated very *disproportionately* in those sectors of the electorate where one has always found least political interest and a lack of sense of civic virtue, leaving the burden of voting more and more heavily with those who are committed to the democratic process and whose participation maximizes its quality.

A crucial piece of evidence that separates the alleged nation-wide increase in alienation and disaffection from the coincident decrease in turnout is provided by a replication of an analysis first completed following the 1976 elections. The table below replicates that analysis across the past four elections. The general conclusion seems unmistakable. Once one takes account of the interrelationships among trust in government, sense of political efficacy, and turnout it is evident that lower turnout is not at all associated with lower degrees of trust or increased cynicism. Indeed, on the average across the eight comparisons that can be made of turnout rates for citizens distinguished by having high or low trust, turnout is a fraction of a percent *higher* for those exhibiting lesser degrees of trust. (Sense of political efficacy is equally uniformly a *strong* correlate of the propensity to vote.)

Electoral Participation in the Years to Come

A summary view of what we may expect in the way of political participation (including turnout) in future presidential elections can be evoked by reviewing three different sets of relevant factors. The first set of factors con-

NATIONAL ELECTION TURNOUT, 1972-78, WITHIN CATEGORIES OF POLITICAL EFFICACY AND TRUST IN GOVERNMENT

Political Efficacy	Trust in Government							
	1972		1974		1976		1978	
	High	Low	High	Low	High	Low	High	Low
High	81*	81	71	62	83	86	62	65
Low	71	65	43	47	66	63	45	53

*Percent reporting having voted

cerns social structure and social norms. Some aspects of changing age distributions, sex roles, educational levels, and racial equity are thoroughly predictable, and they all argue for an increase in voter turnout. And yet, the intrusion of recent political events on the political significance of each of these factors makes prediction of the political consequences of their change less than certain: e.g., black mobilization may persist, and yet the recent outbursts of black frustration and disillusionment in Miami and Chattanooga indicate that black citizens cannot be taken for granted as regular participants in normally institutionalized electoral parties.

A second set of factors concerns analogous political structures and norms pertaining to party and participation. Here the problem of prediction is somewhat different. Legal barriers to participation are being reduced but they are still in flux. Institutional support for partisanship, which encourages voting turnout, is still undergoing change as a consequence of electoral reforms first introduced a decade ago. The proliferation of elections and possible increased use of the referendum, both of which may detract from voting in presidential elections, may further complicate attempts to project rates of participation in national elections.

Third, and finally, projections into the future must accommodate, if they cannot anticipate, the uniqueness of short-term factors that are more or less characteristic of every national election. Of course, candidates change, as do the salience and content of the issues around which their campaigns are organized. And even the most pervasive of long-term secular trends can be interrupted by unforseen short-term social or economic events as well as by the vagaries of our unique process of presidential candidate selection.

In general, it seems appropriate to expect a continuation or even a modest increase in the present relatively high levels of informal participation. A resurgence of partisanship, and occasions of close partisan competition, would most probably promote a substantial increase in turnout. However, at the same time that changes in social structure and social norms facilitate a wide range of political action, it is also possible that turnout itself may continue its relative decline. Although the topic is appropriate to a more extended and more direct analysis than has been suggested here, it seems likely that American politics is undergoing a qualitative change that may differentiate with increasing sharpness those citizens who are advantaged by personal resources and social location from those who are disadvantaged in both personal and social domains.

It seems likely that the politics of tomorrow will be more heavily oriented by ideology and more sharply focused on issue voting. Issue voting, in turn, is enhanced by most of the long-term social trends, including increased levels of formal education and increased sensitivity to group demands such as represented by the calls for racial and sexual equality. But, to the extent this is true, the complexities of political decision-making will doubtless *discourage* many other citizens who would have voted in a different era. For all that one may decry thoughtless reliance on the symbols of party, and affective response to the call to join in partisan conflict, the earlier dominance of party in national politics doubtless encouraged many otherwise relatively uninterested and uniformed citizens at least to turn out on election day. If the organizing symbols of party are submerged under the diverse appeals of relatively independent candidates, and if candidates argue about the existence and consequence of a Phillips curve based on the relationship between rates of inflation and proportions of unemployment, or the intricate problems of increasing energy supplies, or the complex problems involving the interaction between international trade and domestic industrial production, it seems reasonable to presume that the turnout rate among the disadvantaged will decline still further. Participation in the sectors that already participate at near maximum strength may be preserved, but at the expense of the quantitative egalitarianism which expects at least a high turnout rate on election day. Whether or not such a political future would serve the long-term needs of a system dedicated to representative democracy remains to be seen.

Note: An earlier and expanded version of this article was presented to a Washington University (St. Louis) conference on "National Elections 1980: Continuity and Change in American Politics."

Home-Equity Dissaving Instruments for Older Homeowners

Thomas S. Neubig
Survey Research Center
The University of Michigan

Widespread interest in home-equity dissaving instruments for older homeowners has become evident in the past few years. General agreement exists that a financial instrument which would allow homeowners to use up some of their savings accumulated in the form of housing equity would be beneficial. Such an ability to dissave while remaining in the family home could be a viable alternative to the present choice between selling the home and moving or remaining and bequeathing it to children or others. For many homeowners who have been called "home value rich, but current income poor" and who are pinched by rising property taxes, utility costs, and maintenance expenses, an equity-dissaving instrument could provide important supplementary cash flow.

Since the beginning of last year, federal savings and loan associations have been authorized by the Federal Home Loan Bank Board to offer home-equity dissaving plans. A number of states have taken steps to authorize similar programs for lenders under their jurisdiction. The prospects for such plans from the private sector in the immediate and near future are not promising. Even with a longer horizon, plans that help protect homeowners from inflation and from outliving their assets are not likely without substantial regulatory changes. Government sponsored plans, which characteristically involve at least an implicit subsidy, raise important considerations of equity and efficiency.

Current Methods of Home-Equity Dissaving

For the most part, the equity in the average family's largest single asset, the family home, is not available for use unless the home is sold. Older homeowners have been left with the choice of selling and leaving the home in order to dissave the equity or of bequeathing it. Home ownership to the elderly is important not only for sentimental reasons but also for practical, financial reasons. Contrary to the popular belief that homes owned by the elderly do not appreciate because the homes tend to be older, in need of upkeep, and in economically declining neighborhoods, a recent study found elderly homeowners reporting the market value of their homes on average keeping pace with inflation between 1972 and 1977.[1]

The most common means of dissaving the equity in the home is to let it depreciate through lack of maintenance. In response to a recent Louis Harris poll which asked elderly respondents what they would to with an extra $100, the most frequent answer – given by 21 percent of the respondents – was to make needed additions or repairs to their homes.[2] Deterioration of a home is a destructive means of dissaving because both the value of the house and the quality of the housing are reduced.

A conventional loan would temporarily increase an elderly homeowner's funds, but the principal would have to be repaid during the life of the homeowner. Moving to a smaller home would free some of the original home's equity but would leave the smaller home's value illiquid and would involve monetary and psychological costs. Selling the home and moving into an apartment would free the entire home equity but would leave the elderly person with the possibility of outliving his or her assets. A sale-leaseback arrangement would not require leaving the house, but any future capital gains on it would be lost, and there would still be the possibility of outliving the value of the homeowner's remaining assets unless he or she bought an annuity with the funds.

An optimal dissaving plan would protect the elderly from three major economic risks: (1) mortality risk – the possibility of outliving one's assets; (2) inflation – the possibility of substantial reduction of real purchasing power; and (3) depreciation of one's capital – the possibility of the house falling into disrepair or the neighborhood deteriorating. The mortality risk could be covered by the purchase of a lifetime annuity that would provide regular payments for the life of the purchaser and the spouse. The right to the future capital gain on the home could provide some protection against inflation. Part of the third risk, the depreciation of the house, could be reduced by an insurance provision providing major maintenance and repairs to homes participating in the plan.

Two Reverse Annuity Mortgage Plans

Reverse Annuity Mortgages (RAMs) offer a mechanism for satisfying the requirements mentioned above. We will focus on two of a variety of possible plans that fall under the RAM rubric. Both of these plans would provide payments for the life of the homeowner and spouse while they remain in their home. The payments would be disbursed gradually from a fixed-balance loan with the home as collateral. The loan would be fixed in value, since the principal would be repaid only when the homeowner died or the house was sold, yet the interest would be paid each term out of the annuity payment. Table 1 compares a RAM with the existing alternatives presently available to homeowners wishing to cash out some of their housing equity.

The amount of the monthly or annual payments from a Reverse Annuity Mortgage would depend on four factors: (1) the net equity (the house value minus any remaining mortgage debt) of the homeowner; (2) the percentage of the net equity the homeowner can borrow; (3) the interest rate offered by the financial institution; and (4) the life expectancy of the homeowner and possible survivor.

The first of the two Reverse Annuity Mortgage plans – which we will call RAM_1 in the discussion below – would

[1]Thomas S. Neubig, "Reverse Annuity Mortgages: A Dissaving Mechanism for Older Homeowners," in *Five Thousand American Families - Patterns of Economic Progress, Volume VIII*, Greg J. Duncan and James N. Morgan, editors (Ann Arbor: Institute for Social Research, forthcoming).

[2]Louis Harris, "Retirement," *Across the Board* XVI (5), May 1979: 9-12.

Table 1. CHOICES AVAILABLE TO ELDERLY HOMEOWNERS WISHING TO CASH OUT THEIR HOUSE EQUITY

Choices	Cash Out the Net Equity	Life Tenure in the House	Capture the Price Appreciation	Protection from Out-living One's Capital	Option for Heirs Keeping the Family Home
Living in the home and leaving a large estate	No	Yes	Yes	Yes	Yes
Selling the home and moving to a smaller house	Partially	No	Yes	Yes	No
Moving to a rental residence	Yes	No	No	No	No
Sale-and-lease	Yes	No	No	No	No
Conventional loan	No	Maybe	Yes	No	Maybe
Reverse annuity mortgage*	Yes	Yes	Yes	Yes	Yes

*Not presently available.

take the form of a regular non-amortized loan combined with the purchase of a lifetime annuity. The interest rate used would be the current market interest rate for conventional mortgage loans. The interest rate used on the loan would also be used on the annuity by a single institution. The loan would be open-ended so that it could be renegotiated if the value of the house increased. Refinancing of the loan would provide a larger supplement to the original payment due to the shortened remaining life expectancy of the homeowner.

A single female aged 65 who owned a $30,000 home with no mortgage debt could receive a $520 annual payment from a 9 percent RAM based on 80 percent of the net equity. This payment amount is relatively low because the homeowner's remaining life expectancy is nearly 20 years, and high interest rates drastically reduce the payment amounts. For example, at a 15 percent rate of interest, the annual payment would fall to just $250. If the female homeowner waited five years to begin the 9 percent RAM at age 70, the annual payment would increase to $750, even without the possibility of the home's value increasing during the period. A male homeowner could expect to receive a $750 annual payment at age 65 due to males' shorter life expectancy.

A second plan – RAM_2 – would provide inflation-adjusted payments and increase the possible payment amounts by lowering the effective interest rate and foregoing part of the potential future appreciation of the house. The issuing institution could offer a 3 percent rate of interest on its capital while realizing the inflation premium from any future appreciation of the home. The payments would be automatically indexed for inflation, thereby providing the homeowner substantial protection against rising prices.

From a RAM_2 instrument, the 65-year-old female homeowner would receive almost $1,000 in annual payments, with higher payments later from the inflation adjustment factor, if she was willing to trade any future capital gains from her home. A 65-year-old male with a $30,000 home would receive an initial $1,260 annual payment with a RAM_2.

The Potential Effect of Reverse Annuity Mortgages

Payment amounts for the two plans were calculated for 729 elderly homeowning families from the Panel Study of Income Dynamics, an ongoing project of the Survey Research Center since 1968. The calculation was based on 80 percent of their 1977 net housing equity, age of the family head and spouse, if any, and the then available 9 percent interest rate on conventional mortgages (for the RAM_1 plan). These estimated payment amounts could be considered upper-limit estimates since they assume the same interest rate for both the mortgage loan and the annuity. Partially offsetting this is the possibility that some elderly families might postpone starting the plan until they needed financial assistance in order to increase their future payment amount.

The average annual payment from a RAM_2 calculated in 1977 with a 3 percent interest rate for all elderly homeowners would have been $1,330, with higher benefits later from the inflation adjustment (Table 2). The average payment would have been larger for homeowners aged 75 or older due to their shorter life expectancy. Families below the poverty line in 1977 would have received annual RAM payments averaging $650, less than half the average payments to nonpoor families. The difference was due almost entirely to their lower net equity in homes.

A RAM_2 plan would have provided elderly homeowners with initial annual payments equalling almost 18 percent of their 1977 total family income. The proportion of income represented by RAM plans would have been 24 percent for family heads over age 75, compared to 14 percent for those aged 65 to 74. This difference is due to the larger RAM payments for older family heads as well as the higher incomes of some of the younger heads who were still in the labor force. Despite the relatively small payments to elderly poor homeowners, RAM_2 payments would have added an additional 30 percent to their income in 1977. That fraction increases in importance when it is recalled that these payments would have been fixed in real terms and would not decline in purchasing power with inflation.

Table 2. HOUSING NET EQUITY, ANNUAL REVERSE ANNUITY MORTGAGE (RAM) PAYMENTS, AND RAM PAYMENTS AS A PROPORTION OF 1977 INCOME

Age or Poverty Status	Average Housing Net Equity, 1977	RAM_2 (3%) Average Annual Payment	RAM_2 (3%) Proportion of 1977 Income	RAM_1 (9%) Average Annual Payment	RAM_1 (9%) Proportion of 1977 Income
Age of Family Head					
65-74	$29,020	$1,190	0.140	$ 710	0.084
75 or older	21,830	1,550	0.242	1,130	0.177
Poverty Status, 1977					
Poor	11,630	650	0.306	440	0.212
Non-poor	27,910	1,400	0.165	910	0.109
All Elderly Homeowners	26,340	1,330	0.178	860	0.119

Note: Eighty percent of the net equity was used in the calculation of RAM payments.

Eleven percent of elderly families had incomes below the offical government poverty lines in 1977. Household heads aged 75 or older were more likely to be poor in a single year than elderly heads aged 65 to 74 (25.6 percent compared to 8.8 percent). RAM_2 would have reduced the poverty population of the elderly in 1977 from 11.4 percent to 7.2 percent. Through initial participation in a RAM, one-third of the elderly poor could have been raised out of poverty. Sixty percent of the elderly homeowners whose money incomes were below the poverty line would have been raised above it by the addition of RAM payments. The impact of the RAM_1 would have been nearly the same, reducing the proportion of elderly poor to 7.8 percent. The effect of RAMs on long-run poverty was similar, decreasing the proportion of families who were poor at least 3-out-of-6 years almost by half.

Quite possibly the most significant contribution of RAMs would be to enable many older homeowners to remain in their homes longer. Higher homeownership costs and unforeseen expenses often cause the elderly to consider selling their house; RAMs would provide an alternative means of coping. Unmarried and older household heads are most likely to move out of a single family home, yet these same heads would receive the largest RAM payments relative to their present income.

The Future of Reverse Annuity Mortgages

In the short term, the availability of Reverse Annuity Mortgages will be quite limited, if not nonexistent, with mortgage funds generally tight and expensive. Financial institutions do not need to institute new programs in order to lend out their available funds. High interest rates incorporating an inflation premium and regulations prohibiting a single institution from offering nonamortized loans plus annuities result in RAMs that provide very small payments to interested homeowners. The high implicit rate of interest if the mortgage interest rate exceeds the annuity interest rate, the adverse selection involving annuitants, and the difficulty of ensuring the home's upkeep and potential value all make the long-term prospects unfavorable for privately financed home-equity dissaving instruments with attractive payment amounts.

Low payment amounts probably account for the low demand for such instruments more than the elderly's alleged hesitancy to remortgage their family home. In the 1977 Survey of Consumer Credit, older homeowners reported surprisingly favorable attitudes toward borrowing for medical expenses and living expenses. Eighty percent of homeowners aged 65 or older felt it was all right for someone like themselves to borrow money to cover expenses due to illness. Forty percent felt it was reasonable to borrow to cover living expenses when income was cut. These results were in terms of existing conventional loans; probably more favorable attitudes would emerge if home-equity dissaving instruments were available.

With the current high interest in RAMs and the private sector's unattractive payment levels, government-sponsored alternatives have been proposed. Property tax postponement, low-interest or interest-free loans for home improvements, and sale-leaseback arrangements with local governments all involve or would likely become a form of government subsidy to older homeowners. Since home ownership and home values of the elderly are highly correlated with preretirement incomes, subsidies based on house values would benefit the more affluent elderly. Also, whether older homeowners should be encouraged to remain in their present homes is an efficiency consideration that makes government subsidized RAMs questionable. Government efforts to reduce inflation and to protect all individuals — renters and homeowners, youthful and elderly — by providing inflation-adjusted government bonds would be more efficient and equitable ways to aid older homeowners.

Efforts to increase the housing options of the elderly are needed. Home-equity dissaving instruments that provide short-term loans for assistance, while the homeowner waits for pension coverage or the future sale of the home, may be the first form available despite the high compound interest charges. More sophisticated Reverse Annuity Mortgages will not be generally available despite their potential beneficial impact and protection against inflation or the risk of outliving one's assets. The most likely prospect for older homeowners will be additional favorable treatment of homeownership by government despite the associated problems of equity and efficiency.

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Actual and Projected Economic Indicators

seasonally adjusted

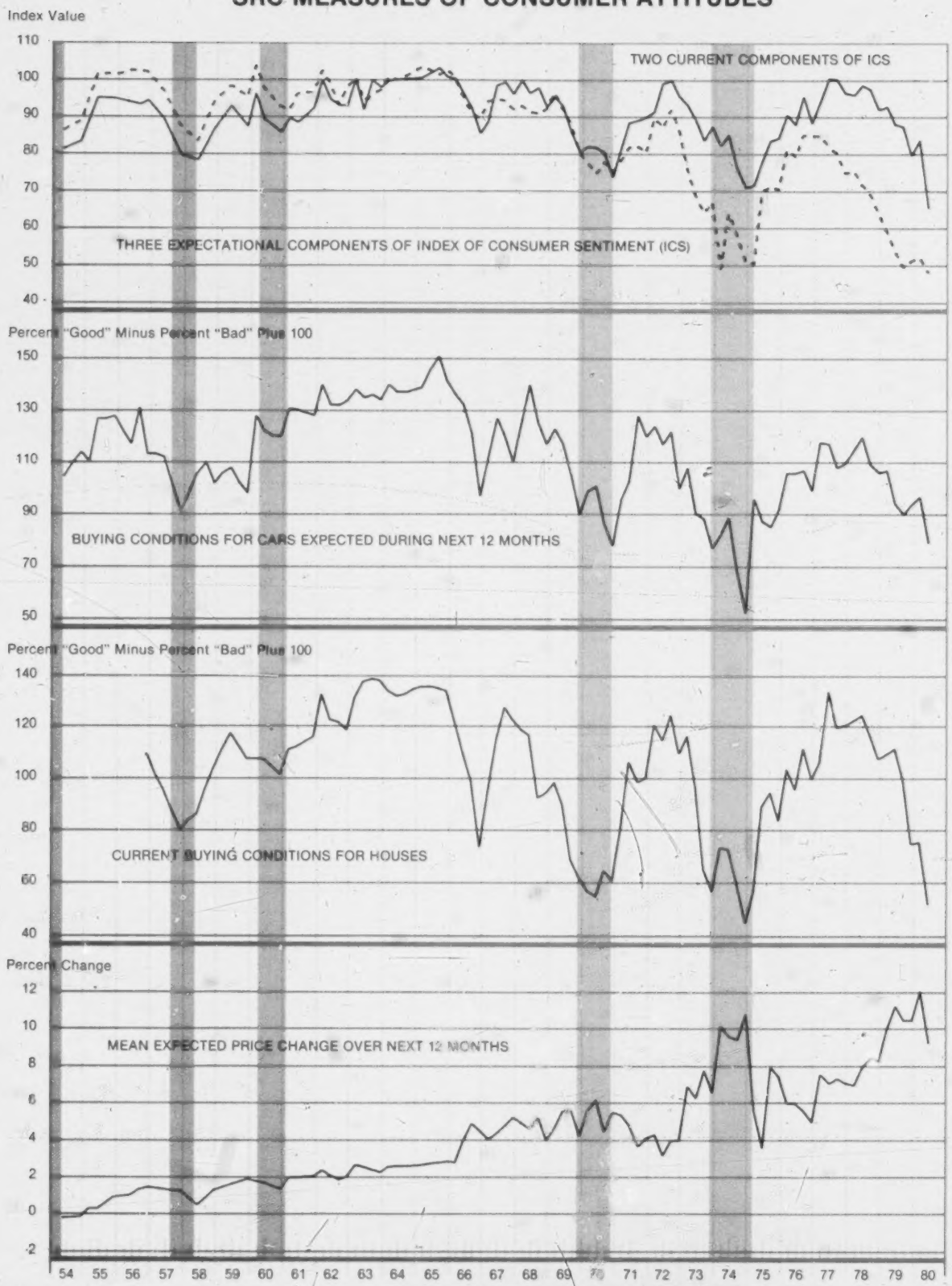
SERIES FORECAST BY THE ASA-NBER PANEL															
ECONOMIC INDICATOR	Quarterly Data												Annual Data		
	Actual							Projected					Actual		Proj.
	1978:4	1979:1	1979:2	1979:3	1979:4	1980:1	1980:2	1980:2	1980:3	1980:4	1981:1	1981:2	1978	1979	1980
GROSS NATIONAL PRODUCT	2235	2292	2330	2397	2457	2521	2523	2544	2578	2630	2710	2773	2128	2369	2568
GNP IMPLICIT PRICE DEFLATOR (index, 1972 = 100)	156.7	160.2	163.8	167.2	170.6	174.5	178.9	178.7	182.9	186.6	190.4	194.5	152.0	165.5	180.7
GNP IN CONSTANT DOLLARS (billions 1972 $)	1427	1431	1422	1433	1440	1445	1411	1425	1410	1407	1416	1428	1399	1432	1422
INDUSTRIAL PRODUCTION (index, 1967 = 100)	150.7	152.2	151.9	152.3	152.2	152.2	144.7	148.0	145.0	143.5	145.0	147.0	146.1	152.1	147.2
UNEMPLOYMENT RATE (quarterly measure, percent)	5.80	5.73	5.77	5.80	5.87	6.13	7.5	7.2	7.8	8.0	8.1	8.0	6.02	5.79	7.28
CORPORATE PROFITS AFTER TAXES	132.3	142.0	139.3	148.3	146.9	158.0	NA	143.0	139.0	134.0	138.0	142.0	121.5	144.6	143.5
EXPENDITURES FOR NEW PLANT and EQUIPMENT	164.0	165.9	173.5	179.3	186.9	191.4	NA	191.0	192.0	192.0	194.0	197.0	153.6	176.4	191.6
NEW PRIVATE HOUSING UNITS STARTED (millions)	2.055	1.665	1.820	1.809	1.593	1.263	1.045	0.95	0.96	1.10	1.20	1.30	2.009	1.722	1.068
CHANGE IN BUSINESS INVENTORIES	20.6	19.1	33.4	14.5	5.6	4.7	11.7	5.0	4.0	2.0	5.0	6.0	22.3	18.15	3.9
CONSUMER DURABLE EXPENDITURES	212.1	213.8	208.7	213.4	216.2	220.2	197.0	215.0	212.0	215.0	220.0	225.0	200.3	213.0	215.6
NATIONAL DEFENSE PURCHASES	101.2	103.4	106.0	109.0	114.6	119.6	123.6	124.0	128.0	133.0	137.0	140.0	99.0	108.3	126.2

SERIES FROM THE GROSS NATIONAL PRODUCT ACCOUNTS															
ECONOMIC INDICATOR	Quarterly Data												Annual Data		
	1977:3	1977:4	1978:1	1978:2	1978:3	1978:4	1979:1	1979:2	1979:3	1979:4	1980:1	1980:2	1977	1978	1979
GROSS NATIONAL PRODUCT	1931	1971	2011	2104	2160	2235	2292	2330	2397	2457	2521	2523	1900	2128	2369
PERSONAL CONSUMPTION EXPENDITURES	1221	1260	1287	1331	1369	1415	1454	1476	1529	1580	1630	1628	1210	1351	1510
DURABLE GOODS	178.9	186.4	185.3	200.3	203.5	212.1	213.8	208.7	213.4	216.2	220.2	197.0	178.8	200.3	213.0
NONDURABLE GOODS	483.0	499.2	505.9	521.8	536.7	558.1	571.1	581.2	604.7	630.7	652.0	654.4	481.4	530.6	596.9
SERVICES	558.7	574.1	596.0	609.1	629.1	645.1	669.3	686.0	710.6	733.5	757.3	776.8	549.8	619.8	699.9
GROSS PRIVATE DOMESTIC INVESTMENT	315.7	316.9	327.0	352.3	356.2	370.5	373.8	395.4	392.3	387.2	387.7	366.9	303.3	351.5	387.2
NONRESIDENTIAL	193.2	198.6	203.7	218.8	225.9	236.1	243.4	249.1	261.8	265.2	272.6	265.9	189.4	221.1	254.9
RESIDENTIAL STRUCTURES	95.0	99.9	100.5	107.7	110.2	113.7	111.2	112.9	116.0	116.4	110.4	89.3	91.9	108.0	114.1
CHANGE IN BUS. INVENTORIES	27.5	18.5	22.8	25.8	20.0	20.6	19.1	33.4	14.5	5.6	4.7	11.7	22.0	22.3	18.2
NET EXPORTS	-6.3	-18.1	-22.2	-7.6	-6.8	-4.5	4.0	-8.1	-2.3	-11.9	-13.6	1.3	-9.9	-10.3	-4.6
GOVERNMENT PURCHASES	400.5	412.8	419.4	428.3	440.9	453.8	460.1	466.6	477.8	501.2	517.2	527.0	396.2	435.6	476.4
DISPOSABLE PERSONAL INCOME	1323	1361	1395	1437	1477	1525	1572	1602	1640	1683	1737	1754	1305	1458	1624
PERSONAL SAVING RATE (% of disposable income)	5.4	5.1	5.3	5.0	4.8	4.7	5.0	5.4	4.3	3.5	3.7	4.7	5.0	5.0	4.55

Note: (1) All data are at annual rates and in billions of current dollars unless otherwise indicated. (2) To facilitate comparison and evaluation of forecasts, both actual data, released in late July, and projected data, released by ASA-NBER in June, are displayed for second quarter 1980.

Sources: Projections: American Statistical Association – National Bureau of Economic Research panel of forecasters.
Actual Data: U.S. Departments of Commerce and Labor, Board of Governors of the Federal Reserve System.

SRC MEASURES OF CONSUMER ATTITUDES



Note: Shaded areas indicate recession periods as designated by the National Bureau of Economic Research, Inc.

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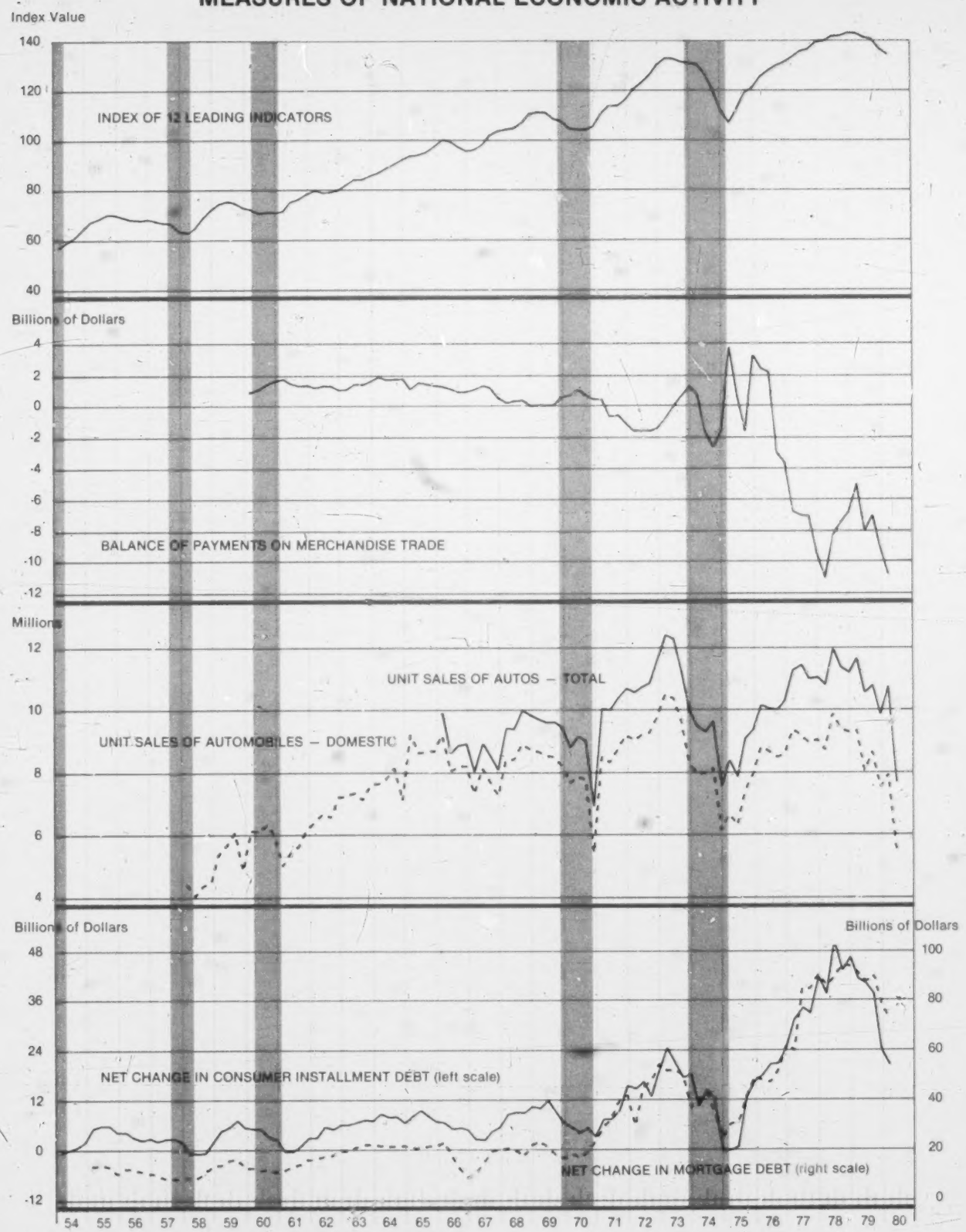
MEASURES OF NATIONAL ECONOMIC ACTIVITY



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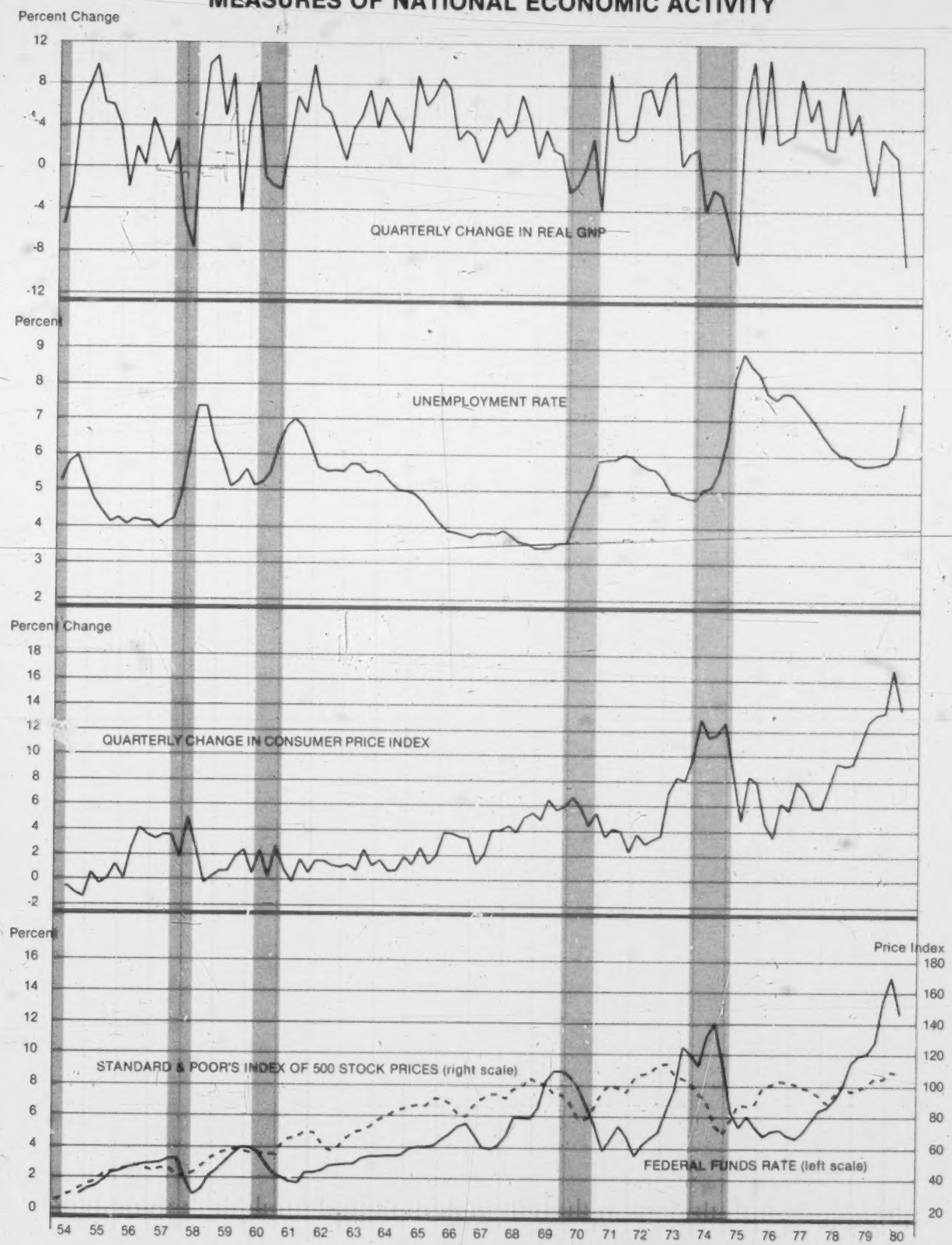

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Essays on Behavioral Economics
George Katona

with a contribution by James N. Morgan

The 1970s were one of the most tumultuous economic periods in recent history. Inflation, two major recessions and the onset of a third one, a decline in the dollar, decreasing productivity . . . bad economic news was everywhere, and the consumer became understandably confused, uncertain, and increasingly pessimistic about the future.

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Katona presents new data from the Surveys of Consumer Attitudes to support his long-held belief that the attitudes of consumers have a powerful effect on the nation's economy. And he refines some existing theories along the way.

Essays on Behavioral Economics is an integrated discussion of an important new discipline. Clear and concise, it presents information that will be of great importance to economists, policy makers, government officials, journalists, and anyone who would like to gain a better perspective on our turbulent economic times.

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